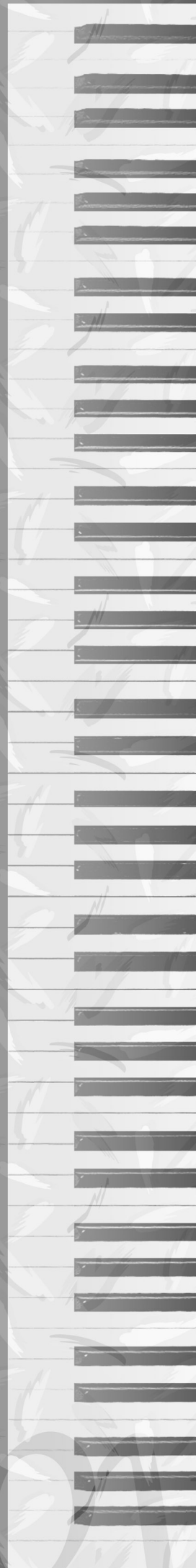
Clavinova®

CLP-175
CLP-170
CLP-150

Reference Booklet
Referenzheft
Livret de référence
Folleto de referencia

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Normal (Default) Setting List / Liste der Grundeinstellungen (Default) / Liste des réglages normaux (par défaut) / Lista de ajustes normales (predeterminados)

Function		Value	Reference page in the Owner's Manual	
			CLP-175	CLP-170/150
Voice selection		Grand Piano 1	30	28
Split mode		Off	37	35
Split point		F#2	38	36
Reverb On/Off		ON	33	31
Chorus On/Off		per voice	33	31
Brilliance mode		Normal	32	30
iAFC ON/OFF (CLP-175/170)		ON	34	32
Metronome	Time signature	4/4	39	37
	Volume	100		
	Voice	BellOff		
Tempo		120	27, 39, 58	25, 37, 56
Transpose		0	94	92
Song select		Preset song [NewSong]	26, 40, 57	24, 38, 55
Song balance		Song balance slider value at power-on	47	45
Recording mode		Extra track channel: 3	45	43
		Start: Normal	43	41
		End: Replace	44	42
Character code		International	56	54

■ Song setting

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170/150
Correcting note timing (Quantize)	Off	75	73
Swing rate (SwingRate)	50%		
Specifying whether playback starts immediately along with the first voicing (QuickPlay)	On	76	74
Auditioning the channels (ChannelListen)	–	76	74
Deleting data from each channel (ChannelClear)	–	76	74
Specifying the range and playing back repeatedly (FromToRepeat)	RepeatOff	76	74
Playing back the phrase specified by the phrase mark (PhraseMark)	RepeatOff	77	75
Playing back a song repeatedly (SongRepeat)	Off	77	75

■ Metronome setting

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170/150
Setting the metronome time signature (TimeSignature)	4/4	78	76
Setting the metronome volume level (MetronomeVolume)	100	78	76
Selecting the metronome voice (MetronomeSound)	BellOff	78	76

Normal (Default) Setting List / Liste der Grundeinstellungen (Default) / Liste des réglages normaux (par défaut) / Lista de ajustes normales (predeterminados)

■ Voice setting

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170/150
Octave (Octave)	per voice	80	78
Volume level (Volume)	per voice	80	78
Position of right and left channels (Pan)	per voice	80	78
Fine pitch adjustment (only in Dual mode) (Detune)	per voice	80	78
Reverb type (ReverbType)	per voice	81	79
Reverb depth (ReverbSend)	per voice	81	79
Chorus type (ChorusType)	per voice	81	79
Chorus depth (ChorusSend)	per voice	81	79
Chorus on/off (ChorusOnOff)	per voice	82	80
Select the DSP type [DSP Type (DSP)]	per voice	82	80
Set the speed of the vibraphone vibrato effect (VibeRotorSpeed(RotorSpeed))	per voice	82	80
Turn the vibraphone vibrato effect on/off [VibeRotorOnOff (RotorOnOff)]	per voice	83	81
Adjust the speed of the rotary speaker [RotarySpeed (Rot.Speed)]	per voice	83	81
Adjust the DSP effect depth (DSPDepth)	per voice	83	81
Adjust the brightness of the sound (Brightness)	per voice	83	81
Adjust the resonance effect [HarmonicContent (Harmonic)]	per voice	83	81
Adjust the low-range frequency of the equalizer [EQ LowFreq. (EQ L.Freq)]	per voice	84	82
Adjust the low-range gain (boost/cut) of the equalizer (EQ LowGain)	per voice	84	82
Adjust the high-range frequency of the equalizer [EQ HighFreq. (EQ H.Freq)]	per voice	84	82
Adjust the high-range gain (boost/cut) of the equalizer (EQ HighGain)	per voice	84	82
Touch sensitivity (TouchSense)	per voice	85	83
Right pedal function (RPedal)	per voice	85	83
Center pedal function (MPedal)	per voice	85	83
Left pedal function (LPedal)	per voice	86	84
Auxiliary pedal function (AuxPedal)	per voice	86	84

■ iAFC setting (CLP-175/170)

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170
Select the iAFC type (iAFC Type)	DynDmpEfx:Semi-Concert SpatialEnsEfx/ NaturalSnd-Brd:Medium	87	85
Adjust the iAFC depth (iAFC Depth)	106	87	85
Calibrate (automatically adjust) (Calibration)	–	88	86
Restore the basic iAFC settings (iAFC Default)	–	88	86

■ MIDI setting

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170/150
MIDI transmit channel (MidiOutChannel)	Main:Ch1, Left:Ch2, Layer:Ch3, LeftLayer:Ch4	90	88
MIDI receive channel (MidiInChannel)	Ch1–16: Song, Ch17: Keyboard, Ch18: Main, Ch19: Left, Ch20: Layer, Ch21: LeftLayer, Others: Off	90	88
Local control on/off (LocalControl)	On	91	89
Selecting performance from the keyboard or song data for MIDI transmission (MidiOutSelect)	Keyboard	91	89
Type of data received via MIDI (ReceiveParameter)	All data: On	91	89
Type of data transmitted via MIDI (TransmitParameter)	All data: On	91	89
Transmitting the initial settings (InitialSetup)	–	92	90
Voice data bulk dump (VoiceBulkDump)	–	92	90

■ Other settings

Function	Value	Reference page in the Owner's Manual	
		CLP-175	CLP-170/150
Selecting a touch response (TouchResponse) Fixed volume	Medium 64	93	91
Fine tuning of the pitch (Tune)	A3=440.0Hz	93	91
Selecting a tuning curve for a piano voice (PianoTuningCurve)	Stretch	93	91
Selecting a scale (Scale) Root note	Equal C	94	92
Specifying the Split Point (SplitPoint)	F#2	94	92
Change the key (Transpose) Transposition amount	Master 0	94	92
Adjusting the depth of the Soft pedal (SoftPedalDepth)	5	95	93
Depth of string resonance (StringResonanceDepth)	5	95	93
Depth of sustain sampling for the damper pedal (SustainSamplingDepth)	5	95	93
Specify the volume of the key-off sound (KeyOffSamplingDepth)	5	95	93
Selecting a pedal function for vibraphone (VibraphonePedalMode)	PianoLike	95	93
Assign the SONG [START/STOP] function to the pedal (PedalStart/Stop)	All pedals : Off	96	94
Selecting a type of auxiliary pedal (AuxPedalType)	Make	96	94
Setting the point at which the damper pedal starts to affect the sound (HalfPedalPoint)	0	96	94
Pitch bend range (PitchBendRange)	2	96	94
Switch the speaker on/off (Speaker)	Normal (HeadphoneSW)	97	95
Selecting the items stored at shutdown (MemoryBackUp)	Transpose:Off Main/LeftVoice:Off Metronome Setting:Off OtherSetting:Off Others:On	97	95
Restoring the normal (default) settings (FactorySet)	MemorySong Excluded	97	95

XG Voice List / XG Voice-Liste / Liste des voix XG / Lista de sonidos XG

- When you specify a program change as a number in the range of 0-127, specify a number that is one less than the program number listed below. For example, to specify program number 128, you would specify program change 127.

■ Bank Select MSB=00

Instrument Group	Pgm#	Bank 0 Bank Select LSB=00	Bank 0	E	KSP Bank 1	E	Stereo Bank 3	E	Single Bank 6	E	Slow Bank 8	E	Fast Decay Bank 12	E	Double Attack Bank 14	E	Bright Bank 16	E	Bank 17	E	Dark Bank 18	E	Bank 19	E	Resonant Bank 20	E	Attack Bank 24	E
Piano	1	Acoustic Grand Piano	GrandPno	2	GrndPnoK	1															MelloGrP	2						
	2	Bright Acoustic Piano	BritePno	2	BritPnoK	1																						
	3	Electric Grand Piano	El.Grand	2	ElGrPnoK	2																						
	4	Honky-tonk Piano	HnkyTonk	2	HnkyTnkK	2																						
	5	Electric Piano 1	E.Piano1	2	El.Pno1K	1															MelloEP1	2						
	6	Electric Piano 2	E.Piano2	2	El.Pno2K	1																						
	7	Harpsichord	Harpsi.	1	Harpsi.K	1																						
	8	Clavi	Clavi.	2	Clavi K	1																						
Chromatic Percussion	9	Celesta	Celesta	1																								
	10	Glockenspiel	Glocken	1																								
	11	Music Box	MusicBox	2																								
	12	Vibraphone	Vibes	1	Vibes K	1																						
	13	Marimba	Marimba	1	MarimbaK	1																						
	14	Xylophone	Xylophon	1																								
	15	Tubular Bells	TubulBel	1																								
	16	Dulcimer	Dulcimer	1																								
Organ	17	Drawbar Organ 1	DrawOrgn	1																								
	18	Percussive Organ	PercOrgn	1																							70sPcOr1	2
	19	Rock Organ	RockOrgn	2																								
	20	Church Organ 1	ChrchOrg	2																								
	21	Reed Organ	ReedOrgn	1																								
	22	Accordion	Acordion	2																								
	23	Hamonica	Harmnica	1																								
	24	Tango Accordion	TangoAcd	2																								
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1													NylonGt2	1										
	26	Acoustic Guitar (steel)	SteelGtr	1													SteelGt2	1										
	27	Electric Guitar (jazz)	Jazz Gtr	1																	MelloGtr	1						
	28	Electric Guitar (clean)	CleanGtr	1																								
	29	Electric Guitar (muted)	Mute.Gtr	1																								
	30	Overdriven Guitar	Ovrdrive	1																								
	31	Distortion Guitar	Dist.Gtr	1																								
	32	Guitar Harmonics	GtrHarmo	1																								
Bass	33	Acoustic Bass	Aco.Bass	1																								
	34	Electric Bass (finger)	FngrBass	1																	FingrDrk	2						
	35	Electric Bass (pick)	PickBass	1																								
	36	Fretless Bass	Fretless	1																								
	37	Slap Bass 1	SlapBas1	1																								
	38	Slap Bass 2	SlapBas2	1																								
	39	Synth Bass 1	SynBass1	1																	SynBa1Dk	1			FastResB	1	AcidBass	1
	40	Synth Bass 2	SynBass2	2					MelloSBa	1			Seq Bass	2							ClkSynBa	2	SynBa2Dk	1				
Strings	41	Violin	Violin	1							Slow Vln	1																
	42	Viola	Viola	1																								
	43	Cello	Cello	1																								
	44	Contrabass	Contrabs	1																								
	45	Tremolo Strings	Trem.Str	1							SlwTrStr	1																
	46	Pizzicato Strings	Pizz.Str	1																								
	47	Orchestral Harp	Harp	1																								
	48	Timpani	Timpani	1																								
Ensemble	49	String Ensemble 1	Strings1	1			S.Strngs	2			Slow Str	1															Arco Str	2
	50	String Ensemble 2	Strings2	1			S.SlwStr	2			LegatoSt	2																
	51	Synth Strings 1	Syn.Str1	2																								
	52	Synth Strings 2	Syn.Str2	2																								
	53	Choir Aahs	ChoirAah	1			S.Choir	2									Ch.Aahs2	2										
	54	Voice Oohs	VoiceOoh	1																								
	55	Synth Voice	SynVoice	1																								
	56	Orchestra Hit	Orch.Hit	2																								
Brass	57	Trumpet	Trumpet	1													Trumpet2	1	BriteTrp	2								
	58	Trombone	Trombone	1																	Trmbone2	2						
	59	Tuba	Tuba	1													Tuba 2	1										
	60	Muted Trumpet	Mute.Trp	1																								
	61	French Horn	Fr. Horn	2					FrHrSolo	1																		
	62	Brass Section 1	BrasSect	1																								
	63	Synth Brass 1	SynBrss1	2									Quack Br	2											RezSynBr	2	PolyBrss	2
	64	Synth Brass 2	SynBrss2	1																	Soft Brs	2						
Reed	65	Soprano Sax	SprnoSax	1																								
	66	Alto Sax	Alto Sax	1																								
	67	Tenor Sax	TenorSax	1																								
	68	Baritone Sax	Bari.Sax	1																								
	69	Oboe	Oboe	2																								
	70	English Horn	Eng.Horn	1																								
	71	Bassoon	Bassoon	1																								
	72	Clarinet	Clarinet	1																								
Pipe	73	Piccolo	Piccolo	1																								
	74	Flute	Flute	1																								
	75	Recorder	Recorder	1																								
	76	Pan Flute	PanFlute	1																								
	77	Blown Bottle	Bottle	2																								
	78	Shakuhachi	Shakhchi	2																								
	79	Whistle	Whistle	1																								
	80	Ocarina	Ocarina	1																								
Synth Lead	81	Lead 1 (square)	SquareLd	2					SquarLd2	1	LMSquare	2									Hollow	1	Shroud	2				
	82	Lead 2 (sawtooth)	Saw Ld	2					Saw Ld 2	1	ThickSaw	2									Dyna Saw	1	Digi Saw	2	Big Lead	2	HeavySyn	2
	83	Lead 3 (calliope)	CaliopLd	2																								
	84	Lead 4 (chiff)	Chiff Ld	2																								
	85	Lead 5 (charang)	CharanLd	2																								
	86	Lead 6 (voice)	Voice Ld	2																							SynthAah	2
	87	Lead 7 (fifths)	Fifth Ld	2																								
	88	Lead 8 (bass+lead)	Bass&Ld	2													Big&Low	2										
Synth Pad	89	Pad 1 (new age)	NewAgePd	2																								
	90	Pad 2 (warm)	Warm Pad	2													ThickPad	2	Soft Pad	2	Sine Pad	2						
	91	Pad 3 (polysynth)	PolySyPd	2																								
	92	Pad 4 (choir)	ChoirPad	2																								
	93	Pad 5 (bowed)	BowedPad	2																								
	94	Pad 6 (metallic)	MetalPad	2																								
	95	Pad 7 (halo)	Halo Pad	2																								
	96	Pad 8 (sweep)	SweepPad	2																					Shwimmer	2		
Synth Effects	97	FX 1 (rain)	Rain	2																								
	98	FX 2 (soundtrack)	SoundTrk	2																								
	99	FX 3 (crystal)	Crystal	2									SynDrCmp	2	Popcorn	2					TinyBell	2						
	100	FX 4 (atmosphere)	Atmosphr	2																	WarmAtms	2	HollwRls	2				
	101	FX 5 (brightness)	Bright	2																								
	102	FX 6 (goblins)	Goblins	2																								
	103	FX 7 (echoes)	Echoes	2							Echoes 2	2			Echo Pan	2												
	104	FX 8 (sci-fi)	Sci-Fi	2																								
Ethnic	105	Sitar	Sitar	1																								
	106	Banjo	Banjo	1																								
	107	Shamisen	Shamisen	1																								
	108	Koto	Koto	1																								
	109	Kalimba	Kalimba	1																								
	110	Bagpipe	Bagpipe	2																								
	111	Fiddle	Fiddle	1																								
	112	Shanai	Shanai	1																								
Percussive	113	Tinkle Bell	TnklBell	2																								
	114	Agogo	Agogo	2																								
	115	Steel Drums	SteelDrm	2																								
	116	Woodblock	Woodblok	1																								
	117	Taiko Drum	TaikoDrm	1																								
	118	Melodic Tom 1	MelodTom	2																								
	119	Synth Drum	Syn Drum	1																								
	120	Reverse Cymbal	RevCymbl	1																								
Sound Effects	121	Guitar Fret Noise	FretNoiz	2																								
	122	Breath Noise	BrthNoiz	2																								
	123	Seashore	Seashore	2																								
	124	Bird Tweet	Tweet	2																								
	125	Telephone Ring	Telphone	1																								
	126	Helicopter	Helicptr	1																								
	127	Applause	Applause	1																								
	128	Gunshot	Gunshot	1																								

: Same as Bank 0 : No sound E : Element number

Instrument Group	Pgm#	Bank 0 Bank Select LSB=00	Bank 0	E	Release Bank 25	E	Rezo Sweep Bank 27	E	Muted Bank 28	E	Detune 1 Bank 32	E	Detune 2 Bank 33	E	Detune 3 Bank 34	E	Octave 1 Bank 35	E	Octave 2 Bank 36	E	5th 1 Bank 37	E	5th 2 Bank 38	E	Bend Bank 39	E	Tutti Bank 40	E
Piano	1	Acoustic Grand Piano	GrandPno	2																							PianoStr	2
	2	Bright Acoustic Piano	BritePno	2																								
	3	Electric Grand Piano	El.Grand	2							Det.CP80	2															LayerCP1	2
	4	Honky-tonk Piano	HnkyTonk	2																								
	5	Electric Piano 1	E.Piano1	2							Chor.EP1	2															HardEl.P	2
	6	Electric Piano 2	E.Piano2	2							Chor.EP2	2	DX Hard	2	DXLegend	2											DX Phase	2
	7	Harpsichord	Harpsi.	1	Harpsi.2	2											Harpsi.3	2										
	8	Clavi	Clavi.	2			ClaviWah	2																				
Chromatic Percussion	9	Celesta	Celesta	1																								
	10	Glockenspiel	Glocken	1																								
	11	Music Box	MusicBox	2																								
	12	Vibraphone	Vibes	1																								
	13	Marimba	Marimba	1																								
	14	Xylophone	Xylophon	1																								
	15	Tubular Bells	TubulBel	1																								
	16	Dulcimer	Dulcimer	1													Dulcimr2	2										
Organ	17	Drawbar Organ 1	DrawOrgn	1							DetDrwOr	2	60sDrOr1	2	60sDrOr2	2	70sDrOr1	2	DrawOrg2	2	60sDrOr3	2	Even Bar	2			16+2"2/3	2
	18	Percussive Organ	PercOrgn	1							DetPrcOr	2	Lite Org	2							PercOrg2	2						
	19	Rock Organ	RockOrgn	2																								
	20	Church Organ 1	ChrchOrg	2							ChurOrg3	2					ChurOrg2	2									NotreDam	2
	21	Reed Organ	ReedOrgn	1																							Puff Org	2
	22	Accordion	Acordion	2							Accordlt	2																
	23	Hamonica	Harmnica	1							Harmo. 2	2																
	24	Tango Accordion	TangoAcd	2																								
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1	NylonGt3	2																						
	26	Acoustic Guitar (steel)	SteelGtr	1													12StrGtr	2									Nyln&Stl	2
	27	Electric Guitar (jazz)	Jazz Gtr	1							Jazz Amp	2																
	28	Electric Guitar (clean)	CleanGtr	1							ChorusGt	2																
	29	Electric Guitar (muted)	Mute.Gtr	1																							FunkGtr1	2
	30	Overdriven Guitar	Ovrdrive	1																								
	31	Distortion Guitar	Dist.Gtr	1																							FeedbkGt	2
	32	Guitar Harmonics	GtrHarmo	1																								
Bass	33	Acoustic Bass	Aco.Bass	1																							JazzRthm	2
	34	Electric Bass (finger)	FngrBass	1			FlangeBa	2																			Ba&DstEG	2
	35	Electric Bass (pick)	PickBass	1					MutePkBa	1																		
	36	Fretless Bass	Fretless	1							Fretles2	2	Fretles3	2	Fretles4	2												
	37	Slap Bass 1	SlapBas1	1			ResoSlap	1			PunchThm	2																
	38	Slap Bass 2	SlapBas2	1																								
	39	Synth Bass 1	SynBass1	1													Clv Bass	2									TechnoBa	2
	40	Synth Bass 2	SynBass2	2							SmthSynB	2															ModulrBa	2
Strings	41	Violin	Violin	1																								
	42	Viola	Viola	1																								
	43	Cello	Cello	1																								
	44	Contrabass	Contrabs	1																								
	45	Tremolo Strings	Trem.Str	1																							Susp.Str	2
	46	Pizzicato Strings	Pizz.Str	1																								
	47	Orchestral Harp	Harp	1																							YangChin	2
	48	Timpani	Timpani	1																								
Ensemble	49	String Ensemble 1	Strings1	1													60sStrng	2									Orchestr	2
	50	String Ensemble 2	Strings2	1																							Warm Str	2
	51	Synth Strings 1	Syn.Str1	2			Reso Str	2																				
	52	Synth Strings 2	Syn.Str2	2																								
	53	Choir Aahs	ChoirAah	1							MelChoir	2															ChoirStr	2
	54	Voice Oohs	VoiceOoh	1																								
	55	Synth Voice	SynVoice	1																							SyVoice2	2
	56	Orchestra Hit	Orch.Hit	2													OrchHit2	2										
Brass	57	Trumpet	Trumpet	1							Warm Trp	2																
	58	Trombone	Trombone	1																								
	59	Tuba	Tuba	1																								
	60	Muted Trumpet	Mute.Trp	1																								
	61	French Horn	Fr. Horn	2							FrHorn 2	1									HornOrch	2						
	62	Brass Section 1	BrasSect	1													Tp&TbSec	2									BrssSec2	2
	63	Synth Brass 1	SynBrss1	2			SynBrss3	2			JumpBrss	2																
	64	Synth Brass 2	SynBrss2	1																							SynBrss4	2
Reed	65	Soprano Sax	SprnoSax	1																								
	66	Alto Sax	Alto Sax	1																							Sax Sect	2
	67	Tenor Sax	TenorSax	1																							BrthTnSx	2
	68	Baritone Sax	Bari.Sax	1																								
	69	Oboe	Oboe	2																								
	70	English Horn	Eng.Horn	1																								
	71	Bassoon	Bassoon	1																								
	72	Clarinet	Clarinet	1																								
Pipe	73	Piccolo	Piccolo	1																								
	74	Flute	Flute	1																								
	75	Recorder	Recorder	1																								
	76	Pan Flute	PanFlute	1																								
	77	Blown Bottle	Bottle	2																								
	78	Shakuhachi	Shakhchi	2																								
	79	Whistle	Whistle	1																								
	80	Ocarina	Ocarina	1																								
Synth Lead	81	Lead 1 (square)	SquareLd	2																								
	82	Lead 2 (sawtooth)	Saw Ld	2	WaspySyn	2																					PulseSaw	2
	83	Lead 3 (calliope)	CaliopLd	2																								
	84	Lead 4 (chiff)	Chiff Ld	2																								
	85	Lead 5 (charang)	CharanLd	2																								
	86	Lead 6 (voice)	Voice Ld	2																								
	87	Lead 7 (fifths)	Fifth Ld	2													Big Five	2										
	88	Lead 8 (bass+lead)	Bass&Ld	2																								
Synth Pad	89	Pad 1 (new age)	NewAgePd	2																								
	90	Pad 2 (warm)	Warm Pad	2																								
	91	Pad 3 (polysynth)	PolySyPd	2																								
	92	Pad 4 (choir)	ChoirPad	2																								
	93	Pad 5 (bowed)	BowedPad	2																								
	94	Pad 6 (metallic)	MetalPad	2																								
	95	Pad 7 (halo)	Halo Pad	2																								
	96	Pad 8 (sweep)	SweepPad	2			Converge	2																				
Synth Effects	97	FX 1 (rain)	Rain	2																								
	98	FX 2 (soundtrack)	SoundTrk	2			Prologue	2																				
	99	FX 3 (crystal)	Crystal	2													RndGlock	2									GlockChi	2
	100	FX 4 (atmosphere)	Atmosphr	2																							Nylon EP	2
	101	FX 5 (brightness)	Bright	2																								
	102	FX 6 (goblins)	Goblins	2																								
	103	FX 7 (echoes)	Echoes	2																								
	104	FX 8 (sci-fi)	Sci-Fi	2																								
Ethnic	105	Sitar	Sitar	1							DetSitar	2					Sitar 2	2										
	106	Banjo	Banjo	1					MuteBnjo	1																		
	107	Shamisen	Shamisen	1																								
	108	Koto	Koto	1																								
	109	Kalimba	Kalimba	1																								
	110	Bagpipe	Bagpipe	2																								
	111	Fiddle	Fiddle	1																								
	112	Shanai	Shanai	1																								
Percussive	113	Tinkle Bell	TnklBell	2																								
	114	Agogo	Agogo	2																								
	115	Steel Drums	SteelDrm	2																								
	116	Woodblock	Woodblok	1																								
	117	Taiko Drum	TaikoDrm	1																								
	118	Melodic Tom 1	MelodTom	2																								
	119	Synth Drum	Syn Drum	1																								
	120	Reverse Cymbal	RevCymbl	1																								
Sound Effects	121	Guitar Fret Noise	FretNoiz	2																								
	122	Breath Noise	BrthNoiz	2																								
	123	Seashore	Seashore	2																								
	124	Bird Tweet	Tweet	2																								
	125	Telephone Ring	Telphone	1																								
	126	Helicopter	Helicptr	1																								
	127	Applause	Applause	1																								
	128	Gunshot	Gunshot	1																								

: Same as Bank 0   : No sound   E : Element number

Instrument Group	Pgm#	Bank 0 Bank Select LSB=00	Bank 0	E	Bank 41	E	Bank 42	E	Bank 43 (Velo-Switch)	E	Bank 45 (Velo-Xfade)	E	Bank 64 (other wave)	E	Bank 65	E	Bank 66	E	Bank 67	E	Bank 68	E	Bank 69	E	Bank 70	E	Bank 71	E
Piano	1	Acoustic Grand Piano	GrandPno	2	Dream	2																						
	2	Bright Acoustic Piano	BritePno	2																								
	3	Electric Grand Piano	El.Grand	2	LayerCP2	2																						
	4	Honky-tonk Piano	HnkyTonk	2																								
	5	Electric Piano 1	E.Piano1	2							VX El.P1	2	60sEl.P1	1														
	6	Electric Piano 2	E.Piano2	2	DX+Analg	2	DXKotoEP	2			VX El.P2	2																
	7	Harpsichord	Harpsi.	1																								
	8	Clavi	Clavi.	2									PulseClv	1	PierceCl	2												
Chromatic Percussion	9	Celesta	Celesta	1																								
	10	Glockenspiel	Glocken	1																								
	11	Music Box	MusicBox	2									Orgel	2														
	12	Vibraphone	Vibes	1							HardVibe	2																
	13	Marimba	Marimba	1									SineMrmb	2														
	14	Xylophone	Xylophon	1																								
	15	Tubular Bells	TubulBel	1																								
	16	Dulcimer	Dulcimer	1																								
Organ	17	Drawbar Organ 1	DrawOrgn	1									Organ Ba	1	70sDrOr2	2	CheezOrg	2	DrawOrg3	2								
	18	Percussive Organ	PercOrgn	1																								
	19	Rock Organ	RockOrgn	2									RotaryOr	2	SloRotar	2	FstRotar	2										
	20	Church Organ 1	ChrchOrg	2									OrgFlute	2	TrmOrgFl	2												
	21	Reed Organ	ReedOrgn	1																								
	22	Accordion	Acordion	2																								
	23	Hamonica	Harmnica	1																								
	24	Tango Accordion	TangoAcd	2									TngoAcd2	2														
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1					VelGtHrm	2																		
	26	Acoustic Guitar (steel)	SteelGtr	1	Stl&Body	2																						
	27	Electric Guitar (jazz)	Jazz Gtr	1																								
	28	Electric Guitar (clean)	CleanGtr	1																								
	29	Electric Guitar (muted)	Mute.Gtr	1	MuteStlG	2			FunkGtr2	2	Jazz Man	1																
	30	Overdriven Guitar	Ovrdrive	1					Gt.Pinch	2																		
	31	Distortion Guitar	Dist.Gtr	1	FeedbkG2	2																						
	32	Guitar Harmonics	GtrHarmo	1											GtFeedbk	1	GtrHrmo2	1										
Bass	33	Acoustic Bass	Aco.Bass	1							VXUprght	2																
	34	Electric Bass (finger)	FngrBass	1					FngrSlap	2	FngBass2	2			Mod.Bass	2												
	35	Electric Bass (pick)	PickBass	1																								
	36	Fretless Bass	Fretless	1																								
	37	Slap Bass 1	SlapBas1	1																								
	38	Slap Bass 2	SlapBas2	1					VeloSlap	2																		
	39	Synth Bass 1	SynBass1	1									Orbiter	2	Sqr.Bass	1	RubberBa	2										
	40	Synth Bass 2	SynBass2	2	DX Bass	2							X WireBa	2														
Strings	41	Violin	Violin	1																								
	42	Viola	Viola	1																								
	43	Cello	Cello	1																								
	44	Contrabass	Contrabs	1																								
	45	Tremolo Strings	Trem.Str	1																								
	46	Pizzicato Strings	Pizz.Str	1																								
	47	Orchestral Harp	Harp	1																								
	48	Timpani	Timpani	1																								
Ensemble	49	String Ensemble 1	Strings1	1	Orchstr2	2	TremOrch	2			Velo.Str	2																
	50	String Ensemble 2	Strings2	1	Kingdom	2							70s Str	1	Strings3	1												
	51	Synth Strings 1	Syn.Str1	2									Syn Str4	2	Syn Str5	2												
	52	Synth Strings 2	Syn.Str2	2																								
	53	Choir Aahs	ChoirAah	1																								
	54	Voice Oohs	VoiceOoh	1																								
	55	Synth Voice	SynVoice	1	Choral	2							AnaVoice	1														
	56	Orchestra Hit	Orch.Hit	2									Impact	2														
Brass	57	Trumpet	Trumpet	1																								
	58	Trombone	Trombone	1																								
	59	Tuba	Tuba	1																								
	60	Muted Trumpet	Mute.Trp	1																								
	61	French Horn	Fr. Horn	2																								
	62	Brass Section 1	BrasSect	1	Hi Brass	2	MelloBrs	2																				
	63	Synth Brass 1	SynBrss1	2							AnVelBr1	2	AnaBrss1	2														
	64	Synth Brass 2	SynBrss2	1	ChoirBrs	2					AnVelBr2	2	AnaBrss2	2														
Reed	65	Soprano Sax	SprnoSax	1																								
	66	Alto Sax	Alto Sax	1					HyprAlto	2																		
	67	Tenor Sax	TenorSax	1	SoftTenr	2							TnrSax 2	1														
	68	Baritone Sax	Bari.Sax	1																								
	69	Oboe	Oboe	2																								
	70	English Horn	Eng.Horn	1																								
	71	Bassoon	Bassoon	1																								
	72	Clarinet	Clarinet	1																								
Pipe	73	Piccolo	Piccolo	1																								
	74	Flute	Flute	1																								
	75	Recorder	Recorder	1																								
	76	Pan Flute	PanFlute	1																								
	77	Blown Bottle	Bottle	2																								
	78	Shakuhachi	Shakhchi	2																								
	79	Whistle	Whistle	1																								
	80	Ocarina	Ocarina	1																								
Synth Lead	81	Lead 1 (square)	SquareLd	2									Mellow	2	SoloSine	2	SineLead	1										
	82	Lead 2 (sawtooth)	Saw Ld	2	Dr. Lead	2					VeloLead	2																
	83	Lead 3 (calliope)	CaliopLd	2											PureLead	2												
	84	Lead 4 (chiff)	Chiff Ld	2									Rubby	2														
	85	Lead 5 (charang)	CharanLd	2									DistLead	2	WireLead	2												
	86	Lead 6 (voice)	Voice Ld	2									Vox Lead	2														
	87	Lead 7 (fifths)	Fifth Ld	2																								
	88	Lead 8 (bass+lead)	Bass&Ld	2									Fat&Prky	2	Soft Wrl	2												
Synth Pad	89	Pad 1 (new age)	NewAgePd	2									Fantasy	2														
	90	Pad 2 (warm)	Warm Pad	2									Horn Pad	2	RotarStr	2												
	91	Pad 3 (polysynth)	PolySyPd	2									PolyPd80	2	ClickPad	2	Ana. Pad	2	SquarPad	2								
	92	Pad 4 (choir)	ChoirPad	2									Heaven	2			Itopia	2	CC Pad	2								
	93	Pad 5 (bowed)	BowedPad	2									Glacier	2	GlassPad	2												
	94	Pad 6 (metallic)	MetalPad	2									Tine Pad	2	Pan Pad	2												
	95	Pad 7 (halo)	Halo Pad	2																								
	96	Pad 8 (sweep)	SweepPad	2									PolarPad	2			Celstial	2										
Synth Effects	97	FX 1 (rain)	Rain	2							ClaviPad	2	HrmoRain	2	AfrcnWnd	2	Carib	2										
	98	FX 2 (soundtrack)	SoundTrk	2									Ancestrl	2														
	99	FX 3 (crystal)	Crystal	2	ClearBel	2	ChorBell	2					SynMalet	1	SftCryst	2	LoudGlok	2	ChrstBel	2	VibeBell	2	DigiBell	2	AirBells	2	BellHarp	2
	100	FX 4 (atmosphere)	Atmosphr	2									NylnHarp	2	Harp Vox	2	AtmosPad	2	Planet	2								
	101	FX 5 (brightness)	Bright	2									FantaBel	2														
	102	FX 6 (goblins)	Goblins	2									GobSynth	2	Creeper	2	Ring Pad	2	Ritual	2	ToHeaven	2			Night	2	Glisten	2
	103	FX 7 (echoes)	Echoes	2									EchoBell	2	Big Pan	2	SynPiano	2	Creation	2	StarDust	2	Reso&Pan	2				
	104	FX 8 (sci-fi)	Sci-Fi	2									Starz	2														
Ethnic	105	Sitar	Sitar	1																								
	106	Banjo	Banjo	1																								
	107	Shamisen	Shamisen	1																								
	108	Koto	Koto	1																								
	109	Kalimba	Kalimba	1																								
	110	Bagpipe	Bagpipe	2																								
	111	Fiddle	Fiddle	1																								
	112	Shanai	Shanai	1									Shanai 2	1														
Percussive	113	Tinkle Bell	TnklBell	2																								
	114	Agogo	Agogo	2																								
	115	Steel Drums	SteelDrm	2																								
	116	Woodblock	Woodblok	1																								
	117	Taiko Drum	TaikoDrm	1																								
	118	Melodic Tom 1	MelodTom	2									Mel Tom2	1	Real Tom	2	Rock Tom	2										
	119	Synth Drum	Syn Drum	1									Ana Tom	1	ElecPerc	2												
	120	Reverse Cymbal	RevCymbl	1																								
Sound Effects	121	Guitar Fret Noise	FretNoiz	2																								
	122	Breath Noise	BrthNoiz	2																								
	123	Seashore	Seashore	2																								
	124	Bird Tweet	Tweet	2																								
	125	Telephone Ring	Telphone	1																								
	126	Helicopter	Helicptr	1																								
	127	Applause	Applause	1																								
	128	Gunshot	Gunshot	1																								

(light grey) : Same as Bank 0 (dark grey) : No sound E : Element number

Instrument Group	Pgm#	Bank 0 Bank Select LSB=00	Bank 0	E	Bank 72	E	Bank 96	E	Bank 97	E	Bank 98	E	Bank 99	E	Bank 100	E	Bank 101	E
Piano	1	Acoustic Grand Piano	GrandPno	2														
	2	Bright Acoustic Piano	BritePno	2														
	3	Electric Grand Piano	El.Grand	2														
	4	Honky-tonk Piano	HnkyTonk	2														
	5	Electric Piano 1	E.Piano1	2														
	6	Electric Piano 2	E.Piano2	2														
	7	Harpsichord	Harpsi.	1														
	8	Clavi	Clavi.	2														
Chromatic Percussion	9	Celesta	Celesta	1														
	10	Glockenspiel	Glocken	1														
	11	Music Box	MusicBox	2														
	12	Vibraphone	Vibes	1														
	13	Marimba	Marimba	1					Balimba	2	Log Drum	2						
	14	Xylophone	Xylophon	1														
	15	Tubular Bells	TubulBel	1			ChrchBel	2	Carillon	2								
	16	Dulcimer	Dulcimer	1			Cimbalom	2	Santur	2								
Organ	17	Drawbar Organ 1	DrawOrgn	1														
	18	Percussive Organ	PercOrgn	1														
	19	Rock Organ	RockOrgn	2														
	20	Church Organ 1	ChrchOrg	2														
	21	Reed Organ	ReedOrgn	1														
	22	Accordion	Acordion	2														
	23	Hamonica	Harmnica	1														
	24	Tango Accordion	TangoAcd	2														
Guitar	25	Acoustic Guitar (nylon) 1	NylonGtr	1			Ukulele	1										
	26	Acoustic Guitar (steel)	SteelGtr	1			Mandolin	2										
	27	Electric Guitar (jazz)	Jazz Gtr	1														
	28	Electric Guitar (clean)	CleanGtr	1														
	29	Electric Guitar (muted)	Mute.Gtr	1														
	30	Overdriven Guitar	Ovrdrive	1														
	31	Distortion Guitar	Dist.Gtr	1														
	32	Guitar Harmonics	GtrHarmo	1														
Bass	33	Acoustic Bass	Aco.Bass	1														
	34	Electric Bass (finger)	FngrBass	1														
	35	Electric Bass (pick)	PickBass	1														
	36	Fretless Bass	Fretless	1			SynFretl	2	SmthFrtl	2								
	37	Slap Bass 1	SlapBas1	1														
	38	Slap Bass 2	SlapBas2	1														
	39	Synth Bass 1	SynBass1	1			Hammer	2										
	40	Synth Bass 2	SynBass2	2														
Strings	41	Violin	Violin	1														
	42	Viola	Viola	1														
	43	Cello	Cello	1														
	44	Contrabass	Contrabs	1														
	45	Tremolo Strings	Trem.Str	1														
	46	Pizzicato Strings	Pizz.Str	1														
	47	Orchestral Harp	Harp	1														
	48	Timpani	Timpani	1														
Ensemble	49	String Ensemble 1	Strings1	1														
	50	String Ensemble 2	Strings2	1														
	51	Synth Strings 1	Syn.Str1	2														
	52	Synth Strings 2	Syn.Str2	2														
	53	Choir Aahs	ChoirAah	1														
	54	Voice Oohs	VoiceOoh	1														
	55	Synth Voice	SynVoice	1														
	56	Orchestra Hit	Orch.Hit	2														
Brass	57	Trumpet	Trumpet	1														
	58	Trombone	Trombone	1														
	59	Tuba	Tuba	1														
	60	Muted Trumpet	Mute.Trp	1														
	61	French Horn	Fr. Horn	2														
	62	Brass Section 1	BrasSect	1														
	63	Synth Brass 1	SynBrss1	2														
	64	Synth Brass 2	SynBrss2	1														
Reed	65	Soprano Sax	SprnoSax	1														
	66	Alto Sax	Alto Sax	1														
	67	Tenor Sax	TenorSax	1														
	68	Baritone Sax	Bari.Sax	1														
	69	Oboe	Oboe	2														
	70	English Horn	Eng.Horn	1														
	71	Bassoon	Bassoon	1														
	72	Clarinet	Clarinet	1														
Pipe	73	Piccolo	Piccolo	1														
	74	Flute	Flute	1														
	75	Recorder	Recorder	1														
	76	Pan Flute	PanFlute	1														
	77	Blown Bottle	Bottle	2														
	78	Shakuhachi	Shakhchi	2														
	79	Whistle	Whistle	1														
	80	Ocarina	Ocarina	1														
Synth Lead	81	Lead 1 (square)	SquareLd	2														
	82	Lead 2 (sawtooth)	Saw Ld	2			Seq Ana.	2										
	83	Lead 3 (calliope)	CaliopLd	2														
	84	Lead 4 (chiff)	Chiff Ld	2														
	85	Lead 5 (charang)	CharanLd	2														
	86	Lead 6 (voice)	Voice Ld	2														
	87	Lead 7 (fifths)	Fifth Ld	2														
	88	Lead 8 (bass+lead)	Bass&Ld	2														
Synth Pad	89	Pad 1 (new age)	NewAgePd	2														
	90	Pad 2 (warm)	Warm Pad	2														
	91	Pad 3 (polysynth)	PolySyPd	2														
	92	Pad 4 (choir)	ChoirPad	2														
	93	Pad 5 (bowed)	BowedPad	2														
	94	Pad 6 (metallic)	MetalPad	2														
	95	Pad 7 (halo)	Halo Pad	2														
	96	Pad 8 (sweep)	SweepPad	2														
Synth Effects	97	FX 1 (rain)	Rain	2														
	98	FX 2 (soundtrack)	SoundTrk	2														
	99	FX 3 (crystal)	Crystal	2	Gamelmba	2												
	100	FX 4 (atmosphere)	Atmosphr	2														
	101	FX 5 (brightness)	Bright	2			Smokey	2										
	102	FX 6 (goblins)	Goblins	2			BelChoir	2										
	103	FX 7 (echoes)	Echoes	2														
	104	FX 8 (sci-fi)	Sci-Fi	2														
Ethnic	105	Sitar	Sitar	1			Tambra	2	Tamboura	2								
	106	Banjo	Banjo	1			Rabab	2	Gopichnt	2	Oud	2						
	107	Shamisen	Shamisen	1														
	108	Koto	Koto	1			Taisho-k	2	Kanoon	2								
	109	Kalimba	Kalimba	1														
	110	Bagpipe	Bagpipe	2														
	111	Fiddle	Fiddle	1														
	112	Shanai	Shanai	1			Pungi	1	Hichriki	2								
Percussive	113	Tinkle Bell	TnklBell	2			Bonang	2	Altair	2	Gamelan	2	S.Gamlan	2	Rama Cym	2	AsianBel	2
	114	Agogo	Agogo	2														
	115	Steel Drums	SteelDrm	2					GlasPerc	2	ThaiBell	2						
	116	Woodblock	Woodblok	1			Castanet	1										
	117	Taiko Drum	TaikoDrm	1			Gr.Cassa	1										
	118	Melodic Tom 1	MelodTom	2														
	119	Synth Drum	Syn Drum	1														
	120	Reverse Cymbal	RevCymbl	1														
Sound Effects	121	Guitar Fret Noise	FretNoiz	2														
	122	Breath Noise	BrthNoiz	2														
	123	Seashore	Seashore	2														
	124	Bird Tweet	Tweet	2														
	125	Telephone Ring	Telphone	1														
	126	Helicopter	Helicptr	1														
	127	Applause	Applause	1														
	128	Gunshot	Gunshot	1														

: Same as Bank 0   : No sound   E : Element number

■ Bank Select MSB=64

SFX

Pch#	Bank 0	E
1	CuttngNz	1
2	CttngNz2	2
3		
4	Str Slap	1
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
16		
17	Fl.KClik	1
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33	Shower	1
34	Thunder	1
35	Wind	1
36	Stream	2
37	Bubble	2
38	Feed	2
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49	Dog	1
50	Horse	1
51	Tweet 2	1
52		
53		
54		
55	Ghost	2
56	Maou	2
57		
58		
59		
60		
61		
62		
63		
64		
65	PhonCall	1
66	DoorSqek	1
67	Door Slam	1
68	ScratchC	1
69	ScratchS	2
70	WindChim	1
71	Telphon2	1
72		
73		
74		
75		
76		
77		
78		
79		
80		
81	CarEIgnt	1
82	CarTSqel	1
83	Car Pass	1
84	CarCrash	1
85	Siren	2
86	Train	1
87	JetPlane	2
88	Starship	2
89	Burst	2
90	Coaster	2
91	Submarin	2
92		
93		
94		
95		
96		
97	Laugh	1
98	Scream	1
99	Punch	1
100	Heart	1
101	Footstep	1
102		
103		
104		
105		
106		
107		
108		
109		
110		
111		
112		
113	MchinGun	1
114	LaserGun	2
115	Xplosion	2
116	Firework	2
117		
118		
119		
120		
121		
122		
123		
124		
125		
126		
127		
128		

XG Drum Kit List / Liste der Drum Kits (Schlagzeug-Sets) / Liste des kits de percussion XG / Lista del kit de batería XG

- Key Off: Keys marked “O” stop sounding the instant they are released.
- Alternate Group: Playing any instrument within a numbered group will immediately stop the sound of any other instrument in the same group of the same number.
- When you specify a program change as a number in the range of 0-127, specify a number that is one less than the program number listed below. For example, to specify program number 128, you would specify program change 127.

Same as Standard Kit 1

No Sound

Bank Select MSB (0-127)				127	127	127	127	127	127	127
Bank Select LSB (0-127)				0	0	0	0	0	0	0
Program Change (1-128)				1	2	9	17	25	26	28
MIDI		Key Off	Alternate Group	Standard Kit1	Standard Kit2	Room Kit	Rock Kit	Electro Kit	Analog Kit	Dance Kit
Note#	Note									
13	C#-1		3	Surdo Mute						
14	D-1		3	Surdo Open						
15	D#-1			Hi Q						
16	E-1			Whip Slap						
17	F-1		4	Scratch H						
18	F#-1		4	Scratch L						
19	G-1			Finger Snap						
20	G#-1			Click Noise						
21	A-1			Metronome Click						
22	A#-1			Metronome Bell						
23	B-1			Seq Click L						
24	C0			Seq Click H						
25	C#0			Brush Tap						
26	D0	O		Brush Swirl						
27	D#0			Brush Slap						
28	E0	O		Brush Tap Swirl				Reverse Cymbal	Reverse Cymbal	Reverse Cymbal
29	F0	O		Snare Roll						
30	F#0			Castanet				Hi Q 2	Hi Q 2	Hi Q 2
31	G0			Snare Soft	Snare Soft 2		Snare Noisy	Snare Snappy Electro	Snare Noisy 4	Snare Techno
32	G#0			Sticks						
33	A0			Kick Soft				Kick 3	Kick 3	Kick Techno Q
34	A#0			Open Rim Shot	Open Rim Shot H Short					Rim Gate
35	B0			Kick Tight			Kick 2	Kick Gate	Kick Analog Short	Kick Techno L
36	C1			Kick	Kick Short		Kick Gate	Kick Gate Heavy	Kick Analog	Kick Techno
37	C#1			Side Stick	Side Stick Light				Side Stick Analog	Side Stick Analog
38	D1			Snare	Snare Short	Snare Snappy	Snare Rock	Snare Noisy 2	Snare Analog	Snare Clap
39	D#1			Hand Clap						
40	E1			Snare Tight	Snare Tight H	Snare Tight Snappy	Snare Rock Tight	Snare Noisy 3	Snare Analog 2	Snare Dry
41	F1			Floor Tom L		Tom Room 1	Tom Rock 1	Tom Electro 1	Tom Analog 1	Tom Analog 1
42	F#1		1	Hi-Hat Closed					Hi-Hat Closed Analog	Hi-Hat Closed 3
43	G1			Floor Tom H		Tom Room 2	Tom Rock 2	Tom Electro 2	Tom Analog 2	Tom Analog 2
44	G#1		1	Hi-Hat Pedal					Hi-Hat Closed Analog 2	Hi-Hat Closed Analog 3
45	A1			Low Tom		Tom Room 3	Tom Rock 3	Tom Electro 3	Tom Analog 3	Tom Analog 3
46	A#1		1	Hi-Hat Open					Hi-Hat Open Analog	Hi-Hat Open 3
47	B1			Mid Tom L		Tom Room 4	Tom Rock 4	Tom Electro 4	Tom Analog 4	Tom Analog 4
48	C2			Mid Tom H		Tom Room 5	Tom Rock 5	Tom Electro 5	Tom Analog 5	Tom Analog 5
49	C#2			Crash Cymbal 1					Crash Analog	Crash Analog
50	D2			High Tom		Tom Room 6	Tom Rock 6	Tom Electro 6	Tom Analog 6	Tom Analog 6
51	D#2			Ride Cymbal 1						
52	E2			Chinese Cymbal						
53	F2			Ride Cymbal Cup						
54	F#2			Tambourine						
55	G2			Splash Cymbal						
56	G#2			Cowbell					Cowbell Analog	Cowbell Analog
57	A2			Crash Cymbal 2						
58	A#2			Vibraslap						
59	B2			Ride Cymbal 2						
60	C3			Bongo H						
61	C#3			Bongo L						
62	D3			Conga H Mute					Conga Analog H	Conga Analog H
63	D#3			Conga H Open					Conga Analog M	Conga Analog M
64	E3			Conga L					Conga Analog L	Conga Analog L
65	F3			Timbale H						
66	F#3			Timbale L						
67	G3			Agogo H						
68	G#3			Agogo L						
69	A3			Cabasa						
70	A#3			Maracas					Maracas 2	Maracas 2
71	B3	O		Samba Whistle H						
72	C4	O		Samba Whistle L						
73	C#4			Guiro Short						
74	D4	O		Guiro Long						
75	D#4			Claves					Claves 2	Claves 2
76	E4			Wood Block H						
77	F4			Wood Block L						
78	F#4			Cuica Mute				Scratch H 2	Scratch H 2	Scratch H 2
79	G4			Cuica Open				Scratch L 2	Scratch L 2	Scratch L 2
80	G#4		2	Triangle Mute						
81	A4		2	Triangle Open						
82	A#4			Shaker						
83	B4			Jingle Bells						
84	C5			Bell Tree						
85	C#5									
86	D5									
87	D#5									
88	E5									
89	F5									
90	F#5									
91	G5									

Bank Select MSB (0-127)				127	127	127	126	126
Bank Select LSB (0-127)				0	0	0	0	0
Program Change (1-128)				33	41	49	1	2
MIDI		Key Off	Alternate Group	Jazz Kit	Brush Kit	Symphony Kit	SFX Kit1	SFX Kit2
Note#	Note							
13	C#-1		3					
14	D-1		3					
15	D#-1							
16	E-1							
17	F-1		4					
18	F#-1		4					
19	G-1							
20	G#-1							
21	A-1							
22	A#-1							
23	B-1							
24	C0							
25	C#0							
26	D0	O						
27	D#0							
28	E0	O						
29	F0	O						
30	F#0							
31	G0			Snare Jazz H	Brush Slap 2			
32	G#0							
33	A0					Kick Soft 2		
34	A#0				Open Rim Shot Light			
35	B0					Gran Cassa		
36	C1			Kick Jazz	Kick Jazz	Gran Cassa Mute	Cutting Noise	Phone Call
37	C#1			Side Stick Light	Side Stick Light		Cutting Noise 2	Door Squeak
38	D1			Snare Jazz L	Brush Slap 3	Band Snare		Door Slam
39	D#1						String Slap	Scratch Cut
40	E1			Snare Jazz M	Brush Tap 2	Band Snare 2		Scratch H 3
41	F1				Tom Brush 1			Wind Chime
42	F#1		1					Telephone Ring 2
43	G1				Tom Brush 2			
44	G#1		1					
45	A1				Tom Brush 3			
46	A#1		1					
47	B1				Tom Brush 4			
48	C2				Tom Brush 5			
49	C#2					Hand Cymbal		
50	D2				Tom Brush 6			
51	D#2					Hand Cymbal Short		
52	E2						Flute Key Click	Car Engine Ignition
53	F2							Car Tires Squeal
54	F#2							Car Passing
55	G2							Car Crash
56	G#2							Siren
57	A2					Hand Cymbal 2		Train
58	A#2							Jet Plane
59	B2					Hand Cymbal 2 Short		Starship
60	C3							Burst
61	C#3							Roller Coaster
62	D3							Submarine
63	D#3							
64	E3							
65	F3							
66	F#3							
67	G3							
68	G#3						Shower	Laugh
69	A3						Thunder	Scream
70	A#3						Wind	Punch
71	B3	O					Stream	Heart Beat
72	C4	O					Bubble	Foot Steps
73	C#4						Feed	
74	D4	O						
75	D#4							
76	E4							
77	F4							
78	F#4							
79	G4							
80	G#4		2					
81	A4		2					
82	A#4							
83	B4							
84	C5						Dog	Machine Gun
85	C#5						Horse	Laser Gun
86	D5						Bird Tweet 2	Explosion
87	D#5							Firework
88	E5							
89	F5							
90	F#5						Ghost	
91	G5						Maou	

XG Effect Type List / Liste der XG-Effekttypen / Liste des types d'effets XG / Lista de tipos de efectos XG

Reverb

Reverb types that can be selected by panel

Type MSB	Type LSB	Effect Name
1	19	Hall1
1	17	Hall2
2	17	Room
3	17	Stage
4	16	Plate

All reverb types

Type MSB	Type LSB	Effect Name
0	0	No Effect
1	0	Hall 1
1	1	Hall 2
1	6	Hall M
1	7	Hall L
1	17	(Hall 2)
1	19	(Hall 1)
2	0	Room 1
2	1	Room 2
2	2	Room 3
2	5	Room S
2	6	Room M
2	7	Room L
2	17	(Room)
3	0	Stage 1
3	1	Stage 2
3	17	(Stage)
3	18	(Sound Board)
4	0	Plate
4	7	GM Plate
4	16	(Plate)
16	0	White Room
17	0	Tunnel
18	0	Canyon
19	0	Basement

Chorus

Chorus types that can be selected by panel

Type MSB	Type LSB	Effect Name
65	8	Chorus
66	8	Celeste
67	1	Flanger

All chorus types

Type MSB	Type LSB	Effect Name
0	0	No Effect
65	0	Chorus 1
65	1	Chorus 2
65	2	Chorus 3
65	3	GM Chorus 1
65	4	GM Chorus 2
65	5	GM Chorus 3
65	6	GM Chorus 4
65	7	FB Chorus
65	8	Chorus 4
66	0	Celeste 1
66	1	Celeste 2
66	2	Celeste 3
66	8	Celeste 4
66	18	(Rotary Speaker)
67	0	Flanger 1
67	1	Flanger 2
67	7	GM Flanger
67	8	Flanger 3
68	0	Synphonic

Variation/Insertion

Variation/insertion effects that can be selected by panel

Type MSB	Type LSB	Effect Name
5	16	Delay LCR
6	0	Delay LR
7	0	Echo
8	0	Cross Delay
68	16	Symphonic
66	18	RotarySpeaker
70	18	Tremolo
119	0	VibeRotor
71	26	AutoPan
72	19	Phaser
78	21	Auto Wah
3	18	Sound Board

All variation/insertion effects

Type MSB	Type LSB	Effect Name
0	0	No Effect
1	0	Hall 1
1	1	Hall 2
1	6	Hall M
1	7	Hall L
1	17	(Hall)
1	19	(Hall)
2	0	Room 1
2	1	Room 2
2	2	Room 3
2	5	Room S
2	6	Room M
2	7	Room L
2	17	(Room)
3	0	Stage 1
3	1	Stage 2
3	17	(Stage)
3	18	(Sound Board)
4	0	Plate
4	7	GM Plate
4	16	(Plate)
5	0	Delay L,C,R
5	16	(Delay LCR)
6	0	Delay L,R
7	0	Echo
8	0	Cross Delay
9	0	ER1*
9	1	ER2*
10	0	Gate Reverb*
11	0	Reverse Gate*
16	0	White Room*
17	0	Tunnel*
18	0	Canyon*
19	0	Basement*
20	0	Karaoke 1*
20	1	Karaoke 2*
20	2	Karaoke 3*
21	0	Tempo Delay*
21	8	Tempo Echo*
22	0	Tempo Cross*
64	0	THRU
65	0	Chorus1
65	1	Chorus2
65	2	Chorus3
65	3	GM Chorus 1
65	4	GM Chorus 2
65	5	GM Chorus 3
65	6	GM Chorus 4
65	7	FB Chorus
65	8	Chorus 4
66	0	Celeste 1
66	1	Celeste 2
66	2	Celeste 3
66	8	Celeste 4
66	18	(Rotary Speaker)
67	0	Flanger 1
67	1	Flanger 2
67	7	GM Flanger
67	8	Flanger 3
68	0	Symphonic
68	16	(Symphonic)
69	0	Rotary SP
69	1	DIST+ROT SP*
69	2	OD+ROT SP*
69	3	AMP SIM+ROT SP*
70	0	Tremolo
70	18	(Tremolo)
71	0	Auto Pan
71	19	(Tremolo)
71	26	(Auto Pan)
72	0	Phaser 1
72	8	Phaser 2*
72	19	(Phaser)
73	0	Distortion*
73	1	COMP+DIST*
73	8	STEREO DIST*
74	0	Over Drive*
74	8	STEREO OD*
75	0	AMP SIM.*
75	8	STEREO A SIM*
76	0	3BAND EQ*
77	0	2BAND EQ*
78	0	AUTO WAH
78	1	AUTO WAH+DIST*
78	2	AUTO WAH+OD*
78	21	(AUTO WAH)
80	0	PITCH CHANGE*
80	1	PITCH CHANGE2*
81	0	HRM ENH*
82	0	TOUCH WAH1
82	1	TOUCH WAH+DIST*
82	2	TOUCH WAH+OD*
82	8	TOUCH WAH 2
83	0	COMPRESSOR*
84	0	NOISE GATE*
85	0	VOICE CANCEL*
86	0	2WAY ROT SP*
86	1	DIST+2ROTSP.*
86	2	OD + 2ROT SP*
86	3	A SIM + 2ROT SP*
87	0	ENS DETUNE*
88	0	AMBIENCE*
93	0	TALK MOD*
94	0	LO-FI*
95	0	DIST+DELAY*
95	1	OD+DELAY*
96	0	CMP+DIST+DLY*
96	1	CMP+OD+DLY*
97	0	WAH+DIST+DLY*
97	1	WAH+OD+DLY*
98	0	V DIST HARD*
98	1	V DIST H+DLY*
98	2	V DIST SOFT*
98	3	V DIST S+DLY*
99	0	DUAL ROTSP1*
99	1	DUAL ROTSP2*
100	0	DIST+T DELAY*
100	1	OD+T DELAY*
101	0	CMP+DIST+TDLY*
101	1	CMP+OD+T DLY*
102	0	WAH+DIST+TDLY*
102	1	WAH+OD+T DLY*
103	0	V DIST H+TDLY*
103	1	V DIST S+T DLY*
119	0	VIBE VIBRATE**

* Variation only
** Insertion only

Effect Parameter List / Liste der Effektparameter / Liste des paramètres d'effets / Lista de parámetros de efectos

- Parameters marked with a ● in the "Control" column can be controlled from an AC1 (assignable cotroller 1) etc. However, these only affect insertion type effects.

HALL1, HALL2
ROOM1, ROOM2, ROOM3
STAGE1, STAGE2
PLATE (reverb, variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4	
2	Diffusion	0-10	0-10		
3	Initial Delay	0.1mS-99.3mS	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k-Thru	34-60	table#3	
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Rev Delay	0.1mS-99.3mS	0-63	table#5	
12	Density	0-4 (reverb, variation block)	0-4		
		0-2 (insertion block)	0-2		
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127		
14	High Damp	0.1-1.0	1-10		
15	Feedback Level	–63-+63	1-127		
16					

DELAY L, C, R (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1-1486.0ms	1-14860		
2	Rch Delay	0.1-1486.0ms	1-14860		
3	Cch Delay	0.1-1486.0ms	1-14860		
4	Feedback Delay	0.1-1486.0ms	1-14860		
5	Feedback Level	–63-+63	1-127		
6	Cch Level	0-127	0-127		
7	High Damp	0.1-1.0	1-10		
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	–12-+12dB	52-76		

DELAY L, R (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay	0.1-1486.0ms	1-14860		
2	Rch Delay	0.1-1486.0ms	1-14860		
3	Feedback Delay 1	0.1-1486.0ms	1-14860		
4	Feedback Delay 2	0.1-1486.0ms	1-14860		
5	Feedback Level	–63-+63	1-127		
6	High Damp	0.1-1.0	1-10		
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	–12-+12dB	52-76		

ECHO (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay1	0.1-743.0ms	1-7430		
2	Lch Feedback Level	–63-+63	1-127		
3	Rch Delay1	0.1-743.0ms	1-7430		
4	Rch Feedback Level	–63-+63	1-127		
5	High Damp	0.1-1.0	1-10		
6	Lch Delay2	0.1-743.0ms	1-7430		
7	Rch Delay2	0.1-743.0ms	1-7430		
8	Delay2 Level	0-127	0-127		
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	–12-+12dB	52-76		

CROSS DELAY (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	L->R Delay	0.1-743.0ms	1-7430		
2	R->L Delay	0.1-743.0ms	1-7430		
3	Feedback Level	–63-+63	1-127		
4	Input Select	L, R, L&R	0-2		
5	High Damp	0.1-1.0	1-10		
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
16	EQ High Gain	–12-+12dB	52-76		

EARLY REF1, EARLY REF2 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Type	S-H, L-H, Rdm, Rvs, Plt, Spr	0-5		
2	Room Size	0.1-7.0	0-44	table#6	
3	Diffusion	0-10	0-10		
4	Initial Delay	0.1mS-200.0mS	0-127	table#5	
5	Feedback Level	–63-+63	1-127		
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k-Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Liveness	0-10	0-10		
12	Density	0-3	0-3		
13	High Damp	0.1-1.0	1-10		
14					
15					
16					

GATE REVERB
REVERSE GATE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Type	TypeA, TypeB	0-1		
2	Room Size	0.1-7.0	0-44	table#6	
3	Diffusion	0-10	0-10		
4	Initial Delay	0.1mS-200.0mS	0-127	table#5	
5	Feedback Level	–63-+63	1-127		
6	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
7	LPF Cutoff	1.0k-Thru	34-60	table#3	
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Liveness	0-10	0-10		
12	Density	0-3	0-3		
13	High Damp	0.1-1.0	1-10		
14					
15					
16					

WHITE ROOM
TUNNEL
CANYON
BASEMENT (reverb, variation block)

No.	Parameter	Display	Value	See Table	Control
1	Reverb Time	0.3-30.0s	0-69	table#4	
2	Diffusion	0-10	0-10		
3	Initial Delay	0.1mS-99.3mS	0-63	table#5	
4	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
5	LPF Cutoff	1.0k-Thru	34-60	table#3	
6	Width	0.5-10.2m	0-37	table#11	
7	Heigt	0.5-20.2m	0-73	table#11	
8	Depth	0.5-30.2m	0-104	table#11	
9	Wall Vary	0-30	0-30		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Rev Delay	0.1mS-99.3mS	0-63	table#5	
12	Density	0-4	0-4		
13	Er/Rev Balance	E63>R - E=R - E<R63	1-127		
14	High Damp	0.1-1.0	1-10		
15	Feedback Level	–63-+63	1-127		
16					

Effect Parameter List / Liste der Effektparameter / Liste des paramètres d'effets / Lista de parámetros de efectos

KARAOKE1, 2, 3 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1mS-400.0mS	0-127	table#7	
2	Feedback Level	–63-+63	1-127		
3	HPF Cutoff	Thru-8.0kHz	0-52	table#3	
4	LPF Cutoff	1.0k-Thru	34-60	table#3	
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13					
14					
15					
16					

TEMPO DELAY
TEMPO ECHO (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3-4thx6	0-19	table#14	
2	Feedback Level	–63-+63	1-127		
3	Feedback High Dump	0-1.0	0-10		
4	L/R Diffusion	1(–63ms)-64(0ms)-127(63ms)	1-127		
5	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
6					
7					
8					
9					
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40		
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58		
16	EQ High Gain	–12-+12dB	52-76		

TEMPO CROSS (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time L>R	64th/3-4thx6	0-19	table#14	
2	Delay Time R>L	64th/3-4thx6	0-19	table#14	
3	Feedback Level	–63-+63	1-127		
4	Input Select	L, R, L&R	0-2		
5	Feedback High Dump	0-1.0	0-10		
6	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
7					
8					
9					
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		●
11					
12					
13	EQ Low Frequency	32Hz-2.0kHz	4-40		
14	EQ Low Gain	–12-+12dB	52-76		
15	EQ High Frequency	500Hz-16.0kHz	28-58		
16	EQ High Gain	–12-+12dB	52-76		

CHORUS1, 2, 3, 4
CELESTE1, 2, 3, 4 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Feedback Level	–63-+63	1-127		
4	Delay Offset	0.0mS-50mS	0-127	table#2	
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14					
15	Input Mode	mono/stereo	0-1		
16					

FLANGER1, 2, 3 (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Feedback Level	–63-+63	1-127		
4	Delay Offset	0.0mS-50mS	0-127	table#2	
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14	LFO Phase Difference	–180-+180deg(resolution=3deg.)	4-124		
15					
16					

SYMPHONIC (chorus, variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Delay Offset	0.0mS-50mS	0-127	table#2	
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14					
15					
16					

ROTARY SPEAKER (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	●
2	LFO Depth	0-127	0-127		
3					
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14					
15					
16					

DISTORTION+ROTARY SPEAKER
OVERDRIVE+ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequenct	0.0-39.7Hz	0-127		●
2	LFO Depth	0-127	0-127		
3					
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40		
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58		
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		
11					
12					
13					
14	Drive	0-127	0-127		
15	LPF Cuttoff	1kHz-Thru	34-60		
16	Output Level	0-127	0-127		

AMP SIM.+ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequenct	0.0-39.7Hz	0-127		●
2	LFO Depth	0-127	0-127		
3	AMP Type	Off, Stack, Combo, Tube	0-3		
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40		
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58		
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		
11					
12					
13					
14	Drive	0-127	0-127		
15	LPF Cuttoff	1kHz-Thru	34-60		
16	Output Level	0-127	0-127		

TREMOLO (variation insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	●
2	AM Depth	0-127	0-127		
3	PM Depth	0-127	0-127		
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10					
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14	LFO Phase Difference	–180-+180deg(resolution=3deg.)	4-124		
15	Input Mode	mono/stereo	0-1		
16					

AUTO PAN (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	●
2	L/R Depth	0-127	0-127		
3	F/R Depth	0-127	0-127		
4	PAN Direction	L<->R, L->R, L<-R, Lturn, Rturn, L/R	0-5		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10					
11	EQ Mid Frequency (variation block)	100Hz-10.0kHz	14-54	table#3	
12	EQ Mid Gain (variation block)	–12-+12dB	52-76		
13	EQ Mid Width (variation block)	1.0-12.0	10-120		
14					
15					
16					

PHASER 1 (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Phase Shift Offset	0-127	0-127		
4	Feedback Level	–63-+63	1-127		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Stage	4-22 (chorus, variation block) 4-12 (insertion block)	4-22 4-12		
12	Diffusion	mono/stereo	0-1		
13					
14					
15					
16					

PHASER 2 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Phase Shift Offset	0-127	0-127		
4	Feedback Level	–63-+63	1-127		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Stage	3-11	3-6		
12					
13	LFO Phase Difference	-180deg-+180deg(resolution=3deg.)	4-124		
14					
15					
16					

DISTORTION
OVERDRIVE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		●
2	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
3	EQ Low Gain	–12-+12dB	52-76		
4	LPF Cutoff	1.0k-Thru	34-60	table#3	
5	Output Level	0-127	0-127		
6					
7	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	
8	EQ Mid Gain	–12-+12dB	52-76		
9	EQ Mid Width	1.0-12.0	10-120		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Edge(Clip Curve)	0-127	0-127	mild-sharp	
12					
13					
14					
15					
16					

COMP+DIST (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		●
2	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
3	EQ Low Gain	–12-+12dB	52-76		
4	LPF Cutoff	1.0k-Thru	34-60	table#3	
5	Output Level	0-127	0-127		
6					
7	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	
8	EQ Mid Gain	–12-+12dB	52-76		
9	EQ Mid Width	1.0-12.0	10-120		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Edge(Clip Curve)	0-127	0-127	mild-sharp	
12	Attack	1ms-40ms	0-19	table#8	
13	Release	10ms-680ms	0-15	table#9	
14	Threshold	–48dB- –6dB	79-121		
15	Ratio	1.0-20.0	0-7	table#10	
16					

STEREO DISTORTION
STEREO OVER DRIVE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		●
2	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
3	EQ Low Gain	–12-+12dB	52-76		
4	LPF Cutoff	1kHz-Thru	34-60		
5	Output Level		0-127		
6					
7	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	
8	EQ Mid Gain	–12-+12dB	52-76		
9	EQ Mid Width	1-12	10-120		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Edge(Clip Curve)	0-127	0-127		
12					
13					
14					
15					
16					

Effect Parameter List / Liste der Effektparameter / Liste des paramètres d'effets / Lista de parámetros de efectos

AMP SIMULATOR (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		●
2	AMP Type	Off, Stack, Combo, Tube	0-3		
3	LPF Cutoff	1.0k-Thru	34-60	table#3	
4	Output Level	0-127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Edge(Clip Curve)	0-127	0-127	mild-sharp	
12					
13					
14					
15					
16					

STEREO AMP SIMULATOR (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Drive	0-127	0-127		●
2	AMP Type	Off, Stack, Combo, Tube	0-3		
3	LPF Cuttoff	1kHz-Thru	34-60		
4	Output Level	0-127	0-127		
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Edge(Clip Curve)	0-127	0-127		
12					
13					
14					
15					
16					

3BAND EQ(MONO) (variation block)

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Gain	–12-+12dB	52-76		
2	EQ Mid Frequency	100Hz-10.0kHz	14-54	table#3	
3	EQ Mid Gain	–12-+12dB	52-76		
4	EQ Mid Width	1.0-12.0	10-120		
5	EQ High Gain	–12-+12dB	52-76		
6	EQ Low Frequency	50Hz-2.0kHz	8-40	table#3	
7	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
8					
9					
10					
11					
12					
13					
14					
15	Input Mode	mono/stereo	0-1		
16					

2BAND EQ(STEREO) (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
2	EQ Low Gain	–12-+12dB	52-76		
3	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
4	EQ High Gain	–12-+12dB	52-76		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

AUTO WAH (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Cutoff Frequency Offset	0-127	0-127		●
4	Resonance	1.0-12.0	10-120		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Drive (variation block)	0-127	0-127		
12					
13					
14					
15					
16					

AUTO WAH+DIST
AUTO WHA+ODRV (variation block)

No.	Parameter	Display	Value	See Table	Control
1	LFO Frequency	0.00Hz-39.7Hz	0-127	table#1	
2	LFO Depth	0-127	0-127		
3	Cutoff Frequency Offset	0-127	0-127		●
4	Resonance	1.0-12.0	10-120		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Drive	0-127	0-127		
12	EQ Low Gain(distortion)	–12-+12dB	52-76		
13	EQ Mid Gain(distortion)	–12-+12dB	52-76		
14	LPF Cutoff	1.0kHz-thru	34-60	table#3	
15	Output Level	0-127	0-127		
16					

PITCH CHANGE 1 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Pitch	–24-+24	40-88		
2	Initial Delay	0.1mS-400.0mS	0-127	table#7	
3	Fine 1	–50-+50	14-114		
4	Fine 2	–50-+50	14-114		
5	Feedback Level	–63-+63	1-127		
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Pan 1	L63-R63	1-127		
12	Output Level 1	0-127	0-127		
13	Pan 2	L63-R63	1-127		
14	Output Level 2	0-127	0-127		
15					
16					

PITCH CHANGE 2 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Pitch	–24-+24	40-88		
2	Initial Delay	0.1mS-400.0mS	0-127	table#7	
3	Fine 1	–50-+50cent	14-114		
4	Fine 2	–50-+50cent	14-114		
5	Feedback Level	–63-+63	1-127		
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Pan 1	L63-R63	1-127		
12	Output Level 1	0-127	0-127		
13	Pan 2	L63-R63	1-127		
14	Output Level 2	0-127	0-127		
15					
16					

HARMONIC ENHANCER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	HPF Cutoff	500Hz-16.0kHz	28-58		
2	Drive	0-127	0-127		
3	Mix Level	0-127	0-127		
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

TOUCH WAH 1
TOUCH WAH+DIST (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Sensitive	0-127	0-127		
2	Cutoff Frequency Offset	0-127	0-127		●
3	Resonance	1.0-12.0	10-120		
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Drive (variation block)	0-127	0-127		
12					
13					
14					
15					
16					

TOUCH WAH 2
TOUCH WAH+ODRV (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Sensitive	0-127	0-127		
2	Cutoff Frequency Offset	0-127	0-127		●
3	Resonance	1.0-12.0	10-120		
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		
11	Drive (variation block)	0-127	0-127		
12	EQ Low Gain (variation block) (distortion)	–12-+12dB	52-76		
13	EQ Mid Gain (variation block) (distortion)	–12-+12dB	52-76		
14	LPF Cutoff (variation block)	1.0kHz-thru	34-60	table#3	
15	Output Level (variation block)	0-127	0-127		
16	Release (variation block)	10-680mS	52-67	table#12	

COMPRESSOR (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Attack	1-40ms	0-19	table#8	
2	Release	10-680ms	0-15	table#9	
3	Threshold	–48- –6dB	79-121		
4	Ratio	1.0-20.0	0-7	table#10	
5	Output Level	0-127	0-127		
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

NOISE GATE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Attack	1-40ms	0-19	table#8	
2	Release	10-680ms	0-15	table#9	
3	Threshold	–72- –30dB	55-97		
4	Output Level	0-127	0-127		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

VOICE CANCEL (variation block)

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11	Low Adjust	0-26	0-26		
12	High Adjust	0-26	0-26		
13					
14					
15					
16					

2WAY ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0Hz-39.7Hz	0-127	table#1	●
2	Drive Low	0-127	0-127		
3	Drive High	0-127	0-127		
4	Low/High	L63>H - L=H - L<H63	1-127		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10					
11	Crossover Frequency	100Hz-10.0kHz	14-54	table#3	
12	Mic L-R Angle	0deg-180deg(resolution=3deg.)	0-60		
13					
14					
15					
16					

DIST+2WAY ROTARY SPEAKER
OD+2WAY ROTARY SPEAKER (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0-39.7Hz	0-127		●
2	Drive Low	0-127	0-127		
3	Drive High	0-127	0-127		
4	Low/High Balance	L63>H-L=H-L<H=63	1-127		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40		
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58		
9	EQ High Gain	–12-+12dB	52-76		
10					
11	Crossover Frequency	100Hz-10.0kHz	14-54		
12	Mic L-R Angle	0-180deg	0-60		
13					
14	Drive		0-127		
15	LPF Cuttoff	1kHz-Thru	34-60		
16	Output Level		0-127		

AMP SIM.+2WAY ROTARY SP (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed	0.0-39.7Hz	0-127		●
2	Drive Low	0-127	0-127		
3	Drive High	0-127	0-127		
4	Low/High Balance	L63>H-L=H-L<H=63	1-127		
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40		
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58		
9	EQ High Gain	–12-+12dB	52-76		
10					
11	Crossover Frequency	100Hz-10.0kHz	14-54		
12	Mic L-R Angle	0-180deg	0-60		
13	AMP Type	Off, Stack, Combo, Tube(AMPSIM only)	0-3		
14	Drive		0-127		
15	LPF Cuttoff	1kHz-Thru	34-60		
16	Output Level		0-127		

ENSEMBLE DETUNE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Detune	–50-+50cent	14-114		
2	Lch Init Delay	0.0mS-50mS	0-127	table#2	
3	Rch Init Delay	0.0mS-50mS	0-127	table#2	
4					
5					
6					
7					
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	EQ Low Frequency	32Hz-2.0kHz (variation, insertion block)	4-40	table#3	
12	EQ Low Gain	–12-+12dB (variation, insertion block)	52-76		
13	EQ High Frequency	500Hz-16.0kHz (variation, insertion block)	28-58	table#3	
14	EQ High Gain	–12-+12dB (variation, insertion block)	52-76		
15					
16					

AMBIENCE (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.0mS-50mS	0-127	table#2	
2	Output Phase	normal/invers	0-1		
3					
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13					
14					
15					
16					

TALKING MODULATION (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Vowel	a, i, u, e, o	0-4		●
2	Move speed	1-62	1-62		
3	Drive	0-127	0-127		
4	Output Level	0-127	0-127		
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

LO-FI (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Sampling Freq Control	44.1kHz-345Hz	0-127	table#13	
2	Word Length	1-127	1-127		
3	Output Gain	–6-+12dB	0-18		
4	LPF Cutoff	63Hz-Thru	10-60	table#3	
5	Filter Type	Thru, PowerBass, Radio, Tel, Clean, Low	0-5		
6	LPF Resonance	1.0-12.0	10-120		
7	Bit Assign	0-6	0-6		
8	Emphasis	Off/On	0-1		
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13					
14					
15	Input Mode	mono/stereo			
16					

DIST+DELAT
OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Lch Delay Time	0.1-1486.0ms	1-14860		
2	Rch Delay Time	0.1-1486.0ms	1-14860		
3	Delay Feedback Time	0.1-1486.0ms	1-14860		
4	Delay Feedback Level	–63-+63	1-127		
5	Delay Mix	0-127	0-127		
6	Dist Drive	0-127	0-127		
7	Dist Output Level	0-127	0-127		
8	Dist EQ Low Gain	–12-+12dB	52-76		
9	Dist EQ Mid Gain	–12-+12dB	52-76		
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11					
12					
13					
14					
15					
16					

COMP+DIST+DELAT
COMP+OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1-1486.0ms	1-14860		
2	Delay Feedback Level	–63-+63	1-127		
3	Delay Mix	0-127	0-127		
4	Dist Drive	0-127	0-127		
5	Dist Output Level	0-127	0-127		
6	Dist EQ Low Gain	–12-+12dB	52-76		
7	Dist EQ Mid Gain	–12-+12dB	52-76		
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Comp. Attack	1ms-40ms	0-19	table#8	
12	Comp. Release	10ms-680ms	0-15	table#9	
13	Comp. Threshold	–48dB- –6dB	79-121		
14	Comp. Ratio	1.0-20.0	0-7	table#10	
15					
16					

WAH+DIST+DELAT
WAH+OVERDRIVE+DELAT (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	0.1-1486.0ms	1-14860		
2	Delay Feedback Level	–63-+63	1-127		
3	Delay Mix	0-127	0-127		
4	Dist Drive	0-127	0-127		
5	Dist Output Level	0-127	0-127		
6	Dist EQ Low Gain	–12-+12dB	52-76		
7	Dist EQ Mid Gain	–12-+12dB	52-76		
8					
9					
10	Dry/Wet	D63>W - D=W - D<W63	1-127		●
11	Wah Sensitive	0-127	0-127		
12	Wah Cutoff Freq Offset	0-127	0-127		
13	Wah Resonance	1.0-12.0	10-120		
14	Wah Release	10-680ms	52-67	table#12	
15					
16					

V DISTORTION HARD
V DISTORTION SOFT (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0-100%	0-100		
2	Device	Transister/Vintage Tube/ Dist1/Dist2/Fuzz	0-4		
3	Speaker	Flat/Stack/Combo/Twin/ Radio/Megaphone	0-5		
4	Presence	0-20	0-20		
5	Output Level	0-100%	0-100		
6					
7					
8					
9					
10	Dry/Wet Balance	D63>W-D=W-D<W63	1-127		●
11					
12					
13					
14					
15					
16					

V DISTORTION HARD+DELAY
V DISTORTION SOFT+DELAY (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0-100%	0-100		
2	Device	Transister/Vintage Tube/ Dist1/Dist2/Fuzz	0-4		
3	Speaker	Flat/Stack/Combo/Twin/ Radio/Megaphone	0-5		
4	Presence	0-20	0-20		
5	Output Level	0-100%	0-100		
6	Delay Time L	0.1ms-1486.0ms	1-14860		
7	Delay Time R	0.1ms-1486.0ms	1-14860		
8	Delay Feedback Time	0.1ms-1486.0ms	1-14860		
9	Delay Feedback Level	–63-+63	1-127		
10	Dry/Wet Balance	D63>W-D=W-D<W63	1-127		●
11	Delay Mix	0-127	0-127		
12					
13					
14					
15					
16					

DUAL ROTOR SPEAKER1, 2 (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Rotor Speed Slow	0.0-2.65Hz	0-63	table#1	
2	Horn Speed Slow	0.0-2.65Hz	0-63	table#1	
3	Rotor Speed Fast	2.69-39.7Hz	64-127	table#1	
4	Horn Speed Fast	2.69-39.7Hz	64-127	table#1	
5	Slow-Fast Time of R	0-127	0-127		
6	Slow-Fast Time of H	0-127	0-127		
7	Drive Low	0-127	0-127		
8	Drive High	0-127	0-127		
9	Low/High Balance	L63>H-L=H-L<H=63	1-127		
10					
11	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
12	EQ Low Gain	–12-+12dB	52-76		
13	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
14	EQ High Gain	–12-+12dB	52-76		
15	Mic L-R Angle	0-180deg	0-60		
16	Speed Control	Slow/Fast	0/1		●

DIST+TEMPO DELAY
OVERDRIVE+TEMPO DELAY (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3-4thx6	0-19	table#14	
2	Delay Feedback Level	–63-+63	1-127		
3	Delay Mix	0-127	0-127		
4	Dist Drive	0-127	0-127		
5	Dist Output Level	0-127	0-127		
6	Dist EQ Low Gain	–12-+12dB	52-76		
7	Dist EQ High Gain	–12-+12dB	52-76		
8	L/R Diffusion	1(–63ms)-64(0ms)-127(63ms)	1-127		
9	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		●
11					
12					
13					
14					
15					
16					

COMP+DIST+TEMPO DELAY
COMP+OD+TEMPO DELAY (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3-4thx6	0-19	table#14	
2	Delay Feedback Level	–63-+63	1-127		
3	Delay Mix	0-127	0-127		
4	Dist Drive	0-127	0-127		
5	Dist Output Level	0-127	0-127		
6	Dist EQ Low Gain	–12-+12dB	52-76		
7	Dist EQ High Gain	–12-+12dB	52-76		
8	L/R Diffusion	1(–63ms)-64(0ms)-127(63ms)	1-127		
9	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		●
11	Comp. Attack	1ms-40ms	0-19		
12	Comp. Release	10ms-680ms	0-15		
13	Comp. Threshold	–48dB- –6dB	79-121		
14	Comp. Ratio	1.0-20.0	0-7		
15					
16					

WAH+DIST+TEMPO DELAY
WAH+OD+TEMPO DELAY (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Delay Time	64th/3-4thx6	0-19	table#14	
2	Delay Feedback Level	–63-+63	1-127		
3	Delay Mix	0-127	0-127		
4	Dist Drive	0-127	0-127		
5	Dist Output Level	0-127	0-127		
6	Dist EQ Low Gain	–12-+12dB	52-76		
7	Dist EQ High Gain	–12-+12dB	52-76		
8	L/R Diffusion	1(–63ms)-64(0ms)-127(63ms)	1-127		
9	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
10	Dry/Wet	D63>W-D=W-D<W=63	1-127		●
11	Wah Sensitive	0-127	0-127		
12	Wah Cutoff Freq Offset	0-127	0-127		
13	Wah Resonance	1.0-12.0	10-120		
14	Wah Release	10-680mS	52-67		
15					
16					

V DIST HARD+TEMPO DELAY
V DIST SOFT+TEMPO DELAY (variation block)

No.	Parameter	Display	Value	See Table	Control
1	Overdrive	0-100%	0-100		
2	Device	Transister/Vintage Tube/ Dist1/Dist2/Fuzz	0-4		
3	Speaker	Flat/Stack/Combo/Twin/ Radio/Megaphone	0-5		
4	Presence	0-20	0-20		
5	Output Level	0-100%	0-100		
6	Delay Time	64th/3-4thx6	0-19	table#14	
7	Delay Feedback Level	–63-+63	1-127		
8	L/R Diffusion	1(–63ms)-64(0ms)-127(63ms)	1-127		
9	Lag	1(–63ms)-64(0ms)-127(63ms)	1-127		
10	Dry/Wet Balance	D63>W-D=W-D<W63	1-127		●
11	Delay Mix	0-127	0-127		
12					
13					
14					
15					
16					

VIBE VIBRATE (insertion block)

No.	Parameter	Display	Value	See Table	Control
1	Vibrate Speed	0.00Hz-39.7Hz	0-127	table#1	
2	Vibrate Depth(AM)	0-127	0-127		
3	Vibrate Depth(PM)	0-127	0-127		
4					
5					
6	EQ Low Frequency	32Hz-2.0kHz	4-40	table#3	
7	EQ Low Gain	–12-+12dB	52-76		
8	EQ High Frequency	500Hz-16.0kHz	28-58	table#3	
9	EQ High Gain	–12-+12dB	52-76		
10	Dry/Wet Balance	D63>W-D=W-D<W63	1-127		
11					
12					
13					
14	LFO Phase Difference	–180-+180deg(resolution=3deg.)	4-124		
15	Input Mode	mono/stereo	0-1		
16	Vibrate SW	OFF, ON	0-1		●

NO EFFECT (reverb, chorus, variation, insertion block)
THRU (variation, insertion block)

No.	Parameter	Display	Value	See Table	Control
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

* Parameter 10 Dry/Wet only affects insertion type effects.

Effect Data Assign Table / Effektdaten-Zuordnungstabelle / Tableau d’assignation des données d’effets / Tabla de asignación de datos para efectos

Table#1
LFO Frequency

Data	Value	Data	Value
0	0.00	64	2.69
1	0.04	65	2.78
2	0.08	66	2.86
3	0.13	67	2.94
4	0.17	68	3.03
5	0.21	69	3.11
6	0.25	70	3.20
7	0.29	71	3.28
8	0.34	72	3.37
9	0.38	73	3.45
10	0.42	74	3.53
11	0.46	75	3.62
12	0.51	76	3.70
13	0.55	77	3.87
14	0.59	78	4.04
15	0.63	79	4.21
16	0.67	80	4.37
17	0.72	81	4.54
18	0.76	82	4.71
19	0.80	83	4.88
20	0.84	84	5.05
21	0.88	85	5.22
22	0.93	86	5.38
23	0.97	87	5.55
24	1.01	88	5.72
25	1.05	89	6.06
26	1.09	90	6.39
27	1.14	91	6.73
28	1.18	92	7.07
29	1.22	93	7.40
30	1.26	94	7.74
31	1.30	95	8.08
32	1.35	96	8.41
33	1.39	97	8.75
34	1.43	98	9.08
35	1.47	99	9.42
36	1.51	100	9.76
37	1.56	101	10.1
38	1.60	102	10.8
39	1.64	103	11.4
40	1.68	104	12.1
41	1.72	105	12.8
42	1.77	106	13.5
43	1.81	107	14.1
44	1.85	108	14.8
45	1.89	109	15.5
46	1.94	110	16.2
47	1.98	111	16.8
48	2.02	112	17.5
49	2.06	113	18.2
50	2.10	114	19.5
51	2.15	115	20.9
52	2.19	116	22.2
53	2.23	117	23.6
54	2.27	118	24.9
55	2.31	119	26.2
56	2.36	120	27.6
57	2.40	121	28.9
58	2.44	122	30.3
59	2.48	123	31.6
60	2.52	124	33.0
61	2.57	125	34.3
62	2.61	126	37.0
63	2.65	127	39.7

Table#2
Modulation Delay Offset

Data	Value	Data	Value
0	0.0	64	6.4
1	0.1	65	6.5
2	0.2	66	6.6
3	0.3	67	6.7
4	0.4	68	6.8
5	0.5	69	6.9
6	0.6	70	7.0
7	0.7	71	7.1
8	0.8	72	7.2
9	0.9	73	7.3
10	1.0	74	7.4
11	1.1	75	7.5
12	1.2	76	7.6
13	1.3	77	7.7
14	1.4	78	7.8
15	1.5	79	7.9
16	1.6	80	8.0
17	1.7	81	8.1
18	1.8	82	8.2
19	1.9	83	8.3
20	2.0	84	8.4
21	2.1	85	8.5
22	2.2	86	8.6
23	2.3	87	8.7
24	2.4	88	8.8
25	2.5	89	8.9
26	2.6	90	9.0
27	2.7	91	9.1
28	2.8	92	9.2
29	2.9	93	9.3
30	3.0	94	9.4
31	3.1	95	9.5
32	3.2	96	9.6
33	3.3	97	9.7
34	3.4	98	9.8
35	3.5	99	9.9
36	3.6	100	10.0
37	3.7	101	11.1
38	3.8	102	12.2
39	3.9	103	13.3
40	4.0	104	14.4
41	4.1	105	15.5
42	4.2	106	17.1
43	4.3	107	18.6
44	4.4	108	20.2
45	4.5	109	21.8
46	4.6	110	23.3
47	4.7	111	24.9
48	4.8	112	26.5
49	4.9	113	28.0
50	5.0	114	29.6
51	5.1	115	31.2
52	5.2	116	32.8
53	5.3	117	34.3
54	5.4	118	35.9
55	5.5	119	37.5
56	5.6	120	39.0
57	5.7	121	40.6
58	5.8	122	42.2
59	5.9	123	43.7
60	6.0	124	45.3
61	6.1	125	46.9
62	6.2	126	48.4
63	6.3	127	50.0

Table#3
EQ Frequency

Data	Value
0	THRU (0)
1	22
2	25
3	28
4	32
5	36
6	40
7	45
8	50
9	56
10	63
11	70
12	80
13	90
14	100
15	110
16	125
17	140
18	160
19	180
20	200
21	225
22	250
23	280
24	315
25	355
26	400
27	450
28	500
29	560
30	630
31	700
32	800
33	900
34	1.0k
35	1.1k
36	1.2k
37	1.4k
38	1.6k
39	1.8k
40	2.0k
41	2.2k
42	2.5k
43	2.8k
44	3.2k
45	3.6k
46	4.0k
47	4.5k
48	5.0k
49	5.6k
50	6.3k
51	7.0k
52	8.0k
53	9.0k
54	10.0k
55	11.0k
56	12.0k
57	14.0k
58	16.0k
59	18.0k
60	THRU(20.0k)

Table#4
Reverb time

Data	Value	Data	Value
0	0.3	64	17.0
1	0.4	65	18.0
2	0.5	66	19.0
3	0.6	67	20.0
4	0.7	68	25.0
5	0.8	69	30.0
6	0.9		
7	1.0		
8	1.1		
9	1.2		
10	1.3		
11	1.4		
12	1.5		
13	1.6		
14	1.7		
15	1.8		
16	1.9		
17	2.0		
18	2.1		
19	2.2		
20	2.3		
21	2.4		
22	2.5		
23	2.6		
24	2.7		
25	2.8		
26	2.9		
27	3.0		
28	3.1		
29	3.2		
30	3.3		
31	3.4		
32	3.5		
33	3.6		
34	3.7		
35	3.8		
36	3.9		
37	4.0		
38	4.1		
39	4.2		
40	4.3		
41	4.4		
42	4.5		
43	4.6		
44	4.7		
45	4.8		
46	4.9		
47	5.0		
48	5.5		
49	6.0		
50	6.5		
51	7.0		
52	7.5		
53	8.0		
54	8.5		
55	9.0		
56	9.5		
57	10.0		
58	11.0		
59	12.0		
60	13.0		
61	14.0		
62	15.0		
63	16.0		

Table#5
Delay Time(200.0ms)

Data	Value	Data	Value
0	0.1	64	100.8
1	1.7	65	102.4
2	3.2	66	104.0
3	4.8	67	105.6
4	6.4	68	107.1
5	8.0	69	108.7
6	9.5	70	110.3
7	11.1	71	111.9
8	12.7	72	113.4
9	14.3	73	115.0
10	15.8	74	116.6
11	17.4	75	118.2
12	19.0	76	119.7
13	20.6	77	121.3
14	22.1	78	122.9
15	23.7	79	124.4
16	25.3	80	126.0
17	26.9	81	127.6
18	28.4	82	129.2
19	30.0	83	130.7
20	31.6	84	132.3
21	33.2	85	133.9
22	34.7	86	135.5
23	36.3	87	137.0
24	37.9	88	138.6
25	39.5	89	140.2
26	41.0	90	141.8
27	42.6	91	143.3
28	44.2	92	144.9
29	45.7	93	146.5
30	47.3	94	148.1
31	48.9	95	149.6
32	50.5	96	151.2
33	52.0	97	152.8
34	53.6	98	154.4
35	55.2	99	155.9
36	56.8	100	157.5
37	58.3	101	159.1
38	59.9	102	160.6
39	61.5	103	162.2
40	63.1	104	163.8
41	64.6	105	165.4
42	66.2	106	166.9
43	67.8	107	168.5
44	69.4	108	170.1
45	70.9	109	171.7
46	72.5	110	173.2
47	74.1	111	174.8
48	75.7	112	176.4
49	77.2	113	178.0
50	78.8	114	179.5
51	80.4	115	181.1
52	81.9	116	182.7
53	83.5	117	184.3
54	85.1	118	185.8
55	86.7	119	187.4
56	88.2	120	189.0
57	89.8	121	190.6
58	91.4	122	192.1
59	93.0	123	193.7
60	94.5	124	195.3
61	96.1	125	196.9
62	97.7	126	198.4
63	99.3	127	200.0

Table#6
Room Size

Data	Value	Data	Value
0	0.1	64	10.1
1	0.3	65	10.3
2	0.4	66	10.4
3	0.6	67	10.6
4	0.7	68	10.8
5	0.9	69	10.9
6	1.0	70	11.1
7	1.2	71	11.2
8	1.4	72	11.4
9	1.5	73	11.5
10	1.7	74	11.7
11	1.8	75	11.9
12	2.0	76	12.0
13	2.1	77	12.2
14	2.3	78	12.3
15	2.5	79	12.5
16	2.6	80	12.6
17	2.8	81	12.8
18	2.9	82	12.9
19	3.1	83	13.1
20	3.2	84	13.3
21	3.4	85	13.4
22	3.5	86	13.6
23	3.7	87	13.7
24	3.9	88	13.9
25	4.0	89	14.0
26	4.2	90	14.2
27	4.3	91	14.4
28	4.5	92	14.5
29	4.6	93	14.7
30	4.8	94	14.8
31	5.0	95	15.0
32	5.1	96	15.1
33	5.3	97	15.3
34	5.4	98	15.5
35	5.6	99	15.6
36	5.7	100	15.8
37	5.9	101	15.9
38	6.1	102	16.1
39	6.2	103	16.2
40	6.4	104	16.4
41	6.5	105	16.6
42	6.7	106	16.7
43	6.8	107	16.9
44	7.0	108	17.0
45	7.2	109	17.2
46	7.3	110	17.3
47	7.5	111	17.5
48	7.6	112	17.6
49	7.8	113	17.8
50	7.9	114	18.0
51	8.1	115	18.1
52	8.2	116	18.3
53	8.4	117	18.4
54	8.6	118	18.6
55	8.7	119	18.7
56	8.9	120	18.9
57	9.0	121	19.1
58	9.2	122	19.2
59	9.3	123	19.4
60	9.5	124	19.5
61	9.7	125	19.7
62	9.8	126	19.8
63	10.0	127	20.0

Table#7
Delay Time(400.0ms)

Data	Value	Data	Value
0	0.1	64	201.6
1	3.2	65	204.8
2	6.4	66	207.9
3	9.5	67	211.1
4	12.7	68	214.2
5	15.8	69	217.4
6	19.0	70	220.5
7	22.1	71	223.7
8	25.3	72	226.8
9	28.4	73	230.0
10	31.6	74	233.1
11	34.7	75	236.3
12	37.9	76	239.4
13	41.0	77	242.6
14	44.2	78	245.7
15	47.3	79	248.9
16	50.5	80	252.0
17	53.6	81	255.2
18	56.8	82	258.3
19	59.9	83	261.5
20	63.1	84	264.6
21	66.2	85	267.7
22	69.4	86	270.9
23	72.5	87	274.0
24	75.7	88	277.2
25	78.8	89	280.3
26	82.0	90	283.5
27	85.1	91	286.6
28	88.3	92	289.8
29	91.4	93	292.9
30	94.6	94	296.1
31	97.7	95	299.2
32	100.9	96	302.4
33	104.0	97	305.5
34	107.2	98	308.7
35	110.3	99	311.8
36	113.5	100	315.0
37	116.6	101	318.1
38	119.8	102	321.3
39	122.9	103	324.4
40	126.1	104	327.6
41	129.2	105	330.7
42	132.4	106	333.9
43	135.5	107	337.0
44	138.6	108	340.2
45	141.8	109	343.3
46	144.9	110	346.5
47	148.1	111	349.6
48	151.2	112	352.8
49	154.4	113	355.9
50	157.5	114	359.1
51	160.7	115	362.2
52	163.8	116	365.4
53	167.0	117	368.5
54	170.1	118	371.7
55	173.3	119	374.8
56	176.4	120	378.0
57	179.6	121	381.1
58	182.7	122	384.3
59	185.9	123	387.4
60	189.0	124	390.6
61	192.2	125	393.7
62	195.3	126	396.9
63	198.5	127	400.0

Table#8
Compressor Attack Time

Data	Value
0	1
1	2
2	3
3	4
4	5
5	6
6	7
7	8
8	9
9	10
10	12
11	14
12	16
13	18
14	20
15	23
16	26
17	30
18	35
19	40

Table#9
Compressor Release Time

Data	Value	Data	Value
0	10	8	85
1	15	9	100
2	25	10	115
3	35	11	140
4	45	12	170
5	55	13	230
6	65	14	340
7	75	15	680

Table#10
Compressor Ratio

Data	Value	Data	Value
0	1.0	4	5.0
1	1.5	5	7.0
2	2.0	6	10.0
3	3.0	7	20.0

Table#11
Reverb Width;Depth;Height

Data	Value	Data	Value
0	0.5	64	17.6
1	0.8	65	17.9
2	1.0	66	18.2
3	1.3	67	18.5
4	1.5	68	18.8
5	1.8	69	19.1
6	2.0	70	19.4
7	2.3	71	19.7
8	2.6	72	20.0
9	2.8	73	20.2
10	3.1	74	20.5
11	3.3	75	20.8
12	3.6	76	21.1
13	3.9	77	21.4
14	4.1	78	21.7
15	4.4	79	22.0
16	4.6	80	22.4
17	4.9	81	22.7
18	5.2	82	23.0
19	5.4	83	23.3
20	5.7	84	23.6
21	5.9	85	23.9
22	6.2	86	24.2
23	6.5	87	24.5
24	6.7	88	24.9
25	7.0	89	25.2
26	7.2	90	25.5
27	7.5	91	25.8
28	7.8	92	26.1
29	8.0	93	26.5
30	8.3	94	26.8
31	8.6	95	27.1
32	8.8	96	27.5
33	9.1	97	27.8
34	9.4	98	28.1
35	9.6	99	28.5
36	9.9	100	28.8
37	10.2	101	29.2
38	10.4	102	29.5
39	10.7	103	29.9
40	11.0	104	30.2
41	11.2		
42	11.5		
43	11.8		
44	12.1		
45	12.3		
46	12.6		
47	12.9		
48	13.1		
49	13.4		
50	13.7		
51	14.0		
52	14.2		
53	14.5		
54	14.8		
55	15.1		
56	15.4		
57	15.6		
58	15.9		
59	16.2		
60	16.5		
61	16.8		
62	17.1		
63	17.3		

Table#12
Wah Release Time

Data	Value
52	10.0
53	15.0
54	25.0
55	35.0
56	45.0
57	55.0
58	65.0
59	75.0
60	85.0
61	100.0
62	115.0
63	140.0
64	170.0
65	230.0
66	340.0
67	680.0

Table#13
Sampling Freq Control

Data	Value	Data	Value
0	44.1K	64	678.0
1	22.1K	65	668.0
2	14.7K	66	658.0
3	11.0K	67	649.0
4	8.8K	68	639.0
5	7.4K	69	630.0
6	6.3K	70	621.0
7	5.5K	71	613.0
8	4.9K	72	604.0
9	4.5K	73	596.0
10	4.0K	74	588.0
11	3.7K	75	580.0
12	3.4K	76	573.0
13	3.2K	77	565.0
14	2.9K	78	558.0
15	2.8K	79	551.0
16	2.6K	80	544.0
17	2.5K	81	538.0
18	2.3K	82	531.0
19	2.2K	83	525.0
20	2.1K	84	519.0
21	2.0K	85	513.0
22	1.92K	86	507.0
23	1.84K	87	501.0
24	1.76K	88	496.0
25	1.70K	89	490.0
26	1.63K	90	485.0
27	1.58K	91	479.0
28	1.52K	92	474.0
29	1.47K	93	469.0
30	1.42K	94	464.0
31	1.38K	95	459.0
32	1.34K	96	455.0
33	1.30K	97	450.0
34	1.26K	98	445.0
35	1.23K	99	441.0
36	1.19K	100	437.0
37	1.16K	101	432.0
38	1.13K	102	428.0
39	1.10K	103	424.0
40	1.08K	104	420.0
41	1.05K	105	416.0
42	1.03K	106	412.0
43	1.00K	107	408.0
44	980.0	108	405.0
45	959.0	109	401.0
46	938.0	110	397.0
47	919.0	111	394.0
48	900.0	112	390.0
49	882.0	113	387.0
50	865.0	114	383.0
51	848.0	115	380.0
52	832.0	116	377.0
53	817.0	117	374.0
54	802.0	118	371.0
55	788.0	119	368.0
56	774.0	120	364.0
57	760.0	121	361.0
58	747.0	122	359.0
59	735.0	123	356.0
60	723.0	124	353.0
61	711.0	125	350.0
62	700.0	126	347.0
63	689.0	127	345.0

Table#14
Tempo Delay

Data	Value	Data	Value
0	64th/3	64	4thX51
1	64th.	65	4thX52
2	32th	66	4thX53
3	32th/3	67	4thX54
4	32th.	68	4thX55
5	16th	69	4thX56
6	16th/3	70	4thX57
7	16th.	71	4thX58
8	8th	72	4thX59
9	8th/3	73	4thX60
10	8th.	74	4thX61
11	4th	75	4thX62
12	4th/3	76	4thX63
13	4th.	77	4thX64
14	2nd		
15	2nd/3		
16	2nd.		
17	4thX4		
18	4thX5		
19	4thX6		
20	4thX7		
21	4thX8		
22	4thX9		
23	4thX10		
24	4thX11		
25	4thX12		
26	4thX13		
27	4thX14		
28	4thX15		
29	4thX16		
30	4thX17		
31	4thX18		
32	4thX19		
33	4thX20		
34	4thX21		
35	4thX22		
36	4thX23		
37	4thX24		
38	4thX25		
39	4thX26		
40	4thX27		
41	4thX28		
42	4thX29		
43	4thX30		
44	4thX31		
45	4thX32		
46	4thX33		
47	4thX34		
48	4thX35		
49	4thX36		
50	4thX37		
51	4thX38		
52	4thX39		
53	4thX40		
54	4thX41		
55	4thX42		
56	4thX43		
57	4thX44		
58	4thX45		
59	4thX46		
60	4thX47		
61	4thX48		
62	4thX49		
63	4thX50		

MIDI Data Format / MIDI-Datenformat / Format des données MIDI / Formato de datos MIDI

Many MIDI messages listed in the MIDI Data Format are expressed in decimal numbers, binary numbers and hexadecimal numbers. Hexadecimal numbers may include the letter “H” as a suffix.
Also, “n” can freely be defined as any whole number. To enter data/values, refer to the table below.

decimal	hexadecimal	binary	decimal	hexadecimal	binary	decimal	hexadecimal	binary	decimal	hexadecimal	binary
0	00	0000 0000	32	20	0010 0000	64	40	0100 0000	96	60	0110 0000
1	01	0000 0001	33	21	0010 0001	65	41	0100 0001	97	61	0110 0001
2	02	0000 0010	34	22	0010 0010	66	42	0100 0010	98	62	0110 0010
3	03	0000 0011	35	23	0010 0011	67	43	0100 0011	99	63	0110 0011
4	04	0000 0100	36	24	0010 0100	68	44	0100 0100	100	64	0110 0100
5	05	0000 0101	37	25	0010 0101	69	45	0100 0101	101	65	0110 0101
6	06	0000 0110	38	26	0010 0110	70	46	0100 0110	102	66	0110 0110
7	07	0000 0111	39	27	0010 0111	71	47	0100 0111	103	67	0110 0111
8	08	0000 1000	40	28	0010 1000	72	48	0100 1000	104	68	0110 1000
9	09	0000 1001	41	29	0010 1001	73	49	0100 1001	105	69	0110 1001
10	0A	0000 1010	42	2A	0010 1010	74	4A	0100 1010	106	6A	0110 1010
11	0B	0000 1011	43	2B	0010 1011	75	4B	0100 1011	107	6B	0110 1011
12	0C	0000 1100	44	2C	0010 1100	76	4C	0100 1100	108	6C	0110 1100
13	0D	0000 1101	45	2D	0010 1101	77	4D	0100 1101	109	6D	0110 1101
14	0E	0000 1110	46	2E	0010 1110	78	4E	0100 1110	110	6E	0110 1110
15	0F	0000 1111	47	2F	0010 1111	79	4F	0100 1111	111	6F	0110 1111
16	10	0001 0000	48	30	0011 0000	80	50	0101 0000	112	70	0111 0000
17	11	0001 0001	49	31	0011 0001	81	51	0101 0001	113	71	0111 0001
18	12	0001 0010	50	32	0011 0010	82	52	0101 0010	114	72	0111 0010
19	13	0001 0011	51	33	0011 0011	83	53	0101 0011	115	73	0111 0011
20	14	0001 0100	52	34	0011 0100	84	54	0101 0100	116	74	0111 0100
21	15	0001 0101	53	35	0011 0101	85	55	0101 0101	117	75	0111 0101
22	16	0001 0110	54	36	0011 0110	86	56	0101 0110	118	76	0111 0110
23	17	0001 0111	55	37	0011 0111	87	57	0101 0111	119	77	0111 0111
24	18	0001 1000	56	38	0011 1000	88	58	0101 1000	120	78	0111 1000
25	19	0001 1001	57	39	0011 1001	89	59	0101 1001	121	79	0111 1001
26	1A	0001 1010	58	3A	0011 1010	90	5A	0101 1010	122	7A	0111 1010
27	1B	0001 1011	59	3B	0011 1011	91	5B	0101 1011	123	7B	0111 1011
28	1C	0001 1100	60	3C	0011 1100	92	5C	0101 1100	124	7C	0111 1100
29	1D	0001 1101	61	3D	0011 1101	93	5D	0101 1101	125	7D	0111 1101
30	1E	0001 1110	62	3E	0011 1110	94	5E	0101 1110	126	7E	0111 1110
31	1F	0001 1111	63	3F	0011 1111	95	5F	0101 1111	127	7F	0111 1111

- Except the table above, for example 144-159(decimal)/9nH/1001 0000-1001 1111(binary) denotes the Note On Message for each channel (1-16). 176-191/BnH/1011 0000-1011 1111 denotes the Control Change Message for each channel (1-16). 192-207/CnH/1100 0000-1100 1111 denotes the Program Change Message for each channel (1-16). 240/FOH/1111 0000 denotes the start of a System Exclusive Message. 247/F7H/1111 0111 denotes the end of a System Exclusive Message.
- aaH (hexidecimal)/0aaaaaaa (binary) denotes the data address. The address contains High, Mid, and Low.
- bbH/0bbbbbbb denotes the byte count.
- ccH/0ccccccc denotes the check sum.
- ddH/0ddddddd denotes the data/value.

Preset Voice List

- When you specify a program change as a number in the range of 0-127, specify a number that is one less than the program number listed below. For example, to specify program number 128, you would specify program change 127.

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
GRANDPIANO1	GrandPiano1	0	122	1
	MellowPiano	0	123	1
	RockPiano	0	122	3
	HonkyTonkPiano	0	122	4
GRANDPIANO2	GrandPiano2	0	112	1
	BrightPiano	0	112	2
E.PIANO1	E.Piano1	0	122	6
	SynthPiano	0	122	89
E.PIANO2	E.Piano2	0	122	5
	Vintage E.Piano	0	123	5
HARPSICHORD	Harpsichord8'	0	122	7
	Harpsichord8'+4'	0	123	7
E.CLAVICHORD	E.Clavichord	0	122	8
	Wah Clavi.	0	123	8
VIBRAPHONE	Vibraphone	0	122	12
	Marimba	0	122	13
	Celesta	0	122	9
GUITAR	NylonGuitar	0	122	25
	SteelGuitar	0	122	26

Voice group	Voice name	Bank MSB	Bank LSB	Program Change (1-128)
CHURCHORGAN	PipeOrganPrincipal	0	123	20
	PipeOrganTutti	0	122	20
	PipeOrganFlute1	0	124	20
	PipeOrganFlute2	0	125	20
JAZZORGAN	JazzOrgan	0	122	17
	RotaryOrgan	0	124	17
	MellowOrgan	0	125	17
STRINGS	Strings	0	122	49
	SynthStrings	0	122	51
	SlowStrings	0	122	50
CHOIR	Choir	0	122	53
	SlowChoir	0	123	53
	Scat	0	122	54
SYNTH.PAD	SynthPad1	0	122	90
	SynthPad2	0	123	89
WOOD BASS	WoodBass	0	122	33
	Bass&Cymbal	0	124	33
E.BASS	ElectricBass	0	122	34
	FretlessBass	0	122	36

MIDI CHANNEL MESSAGE (1)

○: available

MIDI Events	Status byte		1st Data byte			2nd Data byte			MIDI Reception (respond/ignore)			MIDI Transmission (generated data)			PLAY		REC
	Status		Data	(HEX)	Parameter	Data	(HEX)	Parameter	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
Key Off	8nH	(n:Channel Number)	kk		Key no. (0–127)	vv		Velocity(0–127)	○	○	○	×	○	×	○	×	×
Key On	9nH	(n:Channel Number)	kk		Key no. (0–127)	vv		Key On :vv=1–127 Key Off :vv=0	○	○	○	○ (Keyboard)	○	×	○	×	○
Control Change	BnH		0	(00H)	Bank Select MSB**	0 64 126 127	(00H) (40H) (7EH) (7FH)	Normal SFX voice SFX kit Drum kit	○	○	×	○ (Voice)	○	×	○	○	○
			1	(01H)	Modulation	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	×	○	×	○	○	×
			5	(05H)	Portamento Time	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	×	○	×	○	○	×
			6	(06H)	Data Entry MSB	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			7	(07H)	Main Volume	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			10	(0AH)	Panpot	0–127	(00H... 7FH)	L64	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			11	(0BH)	Expression	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Pedal)	○	×	○	○	○
			32	(20H)	Bank Select LSB**	0–127	(00H... 7FH)	Data	○	○	×	○ (Voice)	○	×	○	○	○
			38	(26H)	Data Entry LSB	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	×	○
			64	(40H)	Sustain(Damper)	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Pedal)	○	×	○	○	○
			65	(41H)	Portamento	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	○	○	○ (All manually played parts)	×	○	×	○	○	×
			66	(42H)	Sostenuto	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	○	○	○ (All manually played parts)	○ (Pedal)	○	×	○	○	○
			67	(43H)	Soft Pedal	0–127	(00H... 7FH)	0...63, 64...127 (OFF, ON)	○	○	○ (All manually played parts)	○ (Pedal)	○	×	○	○	○
			71	(47H)	Harmonic Content	0–127	(00H... 7FH)	-64...0...+63	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			72	(48H)	Release Time	0–127	(00H... 7FH)	-64...0...+63	○	○	○ (All manually played parts)	×	○	×	○	○	×
			73	(49H)	Attack Time	0–127	(00H... 7FH)	-64...0...+63	○	○	○ (All manually played parts)	×	○	×	○	○	×
			74	(4AH)	Brightness	0–127	(00H... 7FH)	-64...0...+63	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			84	(54H)	Portamento Control	0–127	(00H... 7FH)	Key no. (0–127)	○	○	×	×	○	×	○	×	×
			91	(5BH)	Effect1 Depth (Reverb Send Level)	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			93	(5DH)	Effect3 Depth (Chorus Send Level)	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			94	(5EH)	Effect4 Depth (Variation Send Level)	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	×	○	×	○	○	×
			96	(60H)	RPN Increment	–	–	*	○	○	×	×	○	×	○	×	×
			97	(61H)	RPN Decrement	–	–	*	○	○	×	×	○	×	○	×	×
			98	(62H)	NRPN LSB	0–127	(00H... 7FH)	Data	○	○	×	×	○	×	○	○	×
			99	(63H)	NRPN MSB	0–127	(00H... 7FH)	Data	○	○	×	×	○	×	○	○	×
			100	(64H)	RPN LSB	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
			101	(65H)	RPN MSB	0–127	(00H... 7FH)	Data	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
Mode Message	BnH	(n:Channel Number)	120	(78H)	All Sound Off	0	(00H)	Data	○	○	○ (All manually played parts)	×	○	×	○	×	×
			121	(79H)	Reset All Controllers	0	(00H)	Data	○	×	×	×	○	×	○	×	×
			123	(7BH)	All Note Off	0	(00H)	Data	○	○	○ (All manually played parts)	×	○	×	○	×	×
			124	(7CH)	Omni Off	0	(00H)	Data	○	×	×	×	×	×	×	×	×
			125	(7DH)	Omni On	0	(00H)	Data	○	×	×	×	×	×	×	×	×
			126	(7EH)	Mono	0–16	(00H... 10H)	Data	○	×	×	×	○	×	○	×	×
			127	(7FH)	Poly	0	(00H)	Data	○	×	×	×	○	×	○	×	×
Program Change**	CnH	(n:Channel Number)	pp	(00H... 7FH)	Voice number (0–127)	–	–	–	○	○	×	○ (Voice)	○	×	○	○	○
Channel After Touch	DnH	(n:Channel Number)	vv	(00H... 7FH)	Data	–	–	–	○	○	○ (All manually played parts)	×	○	×	○	×	×
Polyphonic After Touch	AnH	(n:Channel Number)	kk	(00H... 7FH)	Key no. (0–127)	vv	(00H... 7FH)	Data	○	×	×	×	○	×	○	×	×
Pitch Bend Change	EnH	(n:Channel Number)	cc	(00H... 7FH)	LSB	dd	(00H... 7FH)	MSB	○	○	○ (All manually played parts)	○ (Pedal)	○	×	○	○	○
Realtime Message	F8H	MIDI Clock	–		–	–		–	×			○			—	—	×
	FAH	Start	–		–	–		–	○			○			—	—	×
	FBH	Continue	–		–	–		–	×			×			—	—	×
	FCH	Stop	–		–	–		–	○			○			—	—	×
	FEH	Active Sens	–		–	–		–	○			○			—	—	×
	FFH	System Reset	–		–	–		–	×			×			—	—	×

* The data byte is ignored.

** For the Bank Select MSB, Bank Select LSB and Program Change numbers of the preset voices, refer to page 22.

MIDI CHANNEL MESSAGE (2)

Parameters controlled by NRPN (Non-Registered Parameter Numbers)

NRPN		Data Entry		Parameter	Data Range	MIDI Reception (respond/ignore)			MIDI Transmission (generated data)			PLAY		REC
MSB	LSB	MSB	LSB			Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
01H	08H	mmH	--	Vibrato Rate	mm : 00H-40H-7FH (-64...0...+63)	○	○	×	×	○	×	○	○	×
01H	09H	mmH	--	Vibrato Depth	mm : 00H-40H-7FH (-64...0...+63)	○	○	×	×	○	×	○	○	×
01H	0AH	mmH	--	Vibrato Delay	mm : 00H-40H-7FH (-64...0...+63)	○	○	×	×	○	×	○	○	×
01H	20H	mmH	--	Low Pass Filter Cutoff Frequency	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
01H	21H	mmH	--	Low Pass Filter Resonance	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
01H	30H	mmH	--	EQ BASS	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
01H	31H	mmH	--	EQ TREBLE	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
01H	34H	mmH	--	EQ BASS Frequency	mm : 04H-28H (32...2.0k [Hz])	○	×	×	×	○	×	○	○	×
01H	35H	mmH	--	EQ TREBLE Frequency	mm : 1CH-3AH (500...16.0k [Hz])	○	×	×	×	○	×	○	○	×
01H	63H	mmH	--	EG Attack Time	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
01H	64H	mmH	--	EG Decay Time	mm : 00H-40H-7FH (-64...0...+63)	○	○	×	×	○	×	○	○	×
01H	66H	mmH	--	EG Release	mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	○	×
14H	rrH	mmH	--	Drum Low Pass Filter Cutoff Frequency	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
15H	rrH	mmH	--	Drum Low Pass Filter Resonance	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
16H	rrH	mmH	--	Drum EG Attack Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
17H	rrH	mmH	--	Drum EG Decay Rate	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
18H	rrH	mmH	--	Drum Pitch Coarse	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
19H	rrH	mmH	--	Drum Pitch Fine	rr : drum instrument note number mm : 00H-40H-7FH (-64...0...+63)	○	×	×	×	○	×	○	×	×
1AH	rrH	mmH	--	Drum Level	rr : drum instrument note number mm : 00H-7FH (0...127)	○	×	×	×	○	×	○	×	×
1CH	rrH	mmH	--	Drum Pan	rr : drum instrument note number mm : 00H, 01H-40H-7FH (RND, L63...C...R63)	○	×	×	×	○	×	○	×	×
1DH	rrH	mmH	--	Drum Reverb Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	○	×	×	×	○	×	○	×	×
1EH	rrH	mmH	--	Drum Chorus Send Level	rr : drum instrument note number mm : 00H-7FH (0...127)	○	×	×	×	○	×	○	×	×
1FH	rrH	mmH	--	Drum Variation Send Level	rr : drum instrument note number mm : 00H-7FH (0...127) (Variation Connection = SYSTEM) mm : 00H, 01H-7FH (OFF, ON) (Variation Connection = INSERTION)	○	×	×	×	○	×	○	×	×

NRPN MSB: 14H-1FH (for drums) message is accepted as long as the channel is set with a drum voice.
Data Entry LSB: Ignored.

Parameters controlled by RPN (Registered Parameter Numbers)

NRPN		Data Entry		Parameter	Data Range	MIDI Reception (respond/ignore)			MIDI Transmission (generated data)			PLAY		REC
MSB	LSB	MSB	LSB			Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
00H	00H	mmH	--	Pitch Bend Sensitivity	mm : 00H-18H (0...+24 [semitones])	○	○	○ (All manually played parts)	○ (Other Setting)	○	×	○	○	○
00H	01H	mmH	llH	Fine Tune	mm ll : 00H 00H -100 [cent] ... mm ll : 40H 00H 0 [cent] ... mm ll : 7FH 7FH 100 [cent]	○	○	○ (All manually played parts)	○ (Voice Setting)	○	×	○	○	○
00H	02H	mmH	--	Coarse Tune	mm : 28H-40H-58H (-24...0...+24 [semitones])	○	○	○ (All manually played parts)	×	○	×	○	○	×
7FH	7FH	--	--	Null	–	○	○	○ (All manually played parts)	×	○	×	○	×	×

MIDI PARAMETER CHANGE TABLE

* Not Received when Receive Parameter SysEx is set to off.
* Not transmitted when Transmit Parameter SysEx is set to on.

MIDI Parameter Change table (XG SYSTEM)

○: available

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
00	00	00 01 02 03	4	00-0F 00-0F 00-0F 00-0F	MASTER TUNE	-102.4...0...+102.3 [cent] 1st bit3-0 → bit15-12 2nd bit3-0 → bit11-8 3rd bit3-0 → bit7-4 4th bit3-0 → bit3-0	* Panel setting value	○			×	○	×	○	×	×
		04	1	00-7F	MASTER VOLUME	0...127	7F	○	×	×	×	○	×	○	○	×
		05	1	00-7F	MASTER ATTENUATOR	0...127	00	×	×	×	×	×	×	×	×	×
		06	1	28-58	TRANSPOSE	-24...0...+24 [semitones]	40	○	×	×	×	○	×	○	○	×
		7D	1	N	DRUM SETUP RESET	N:Drum setup number	–	○	×	×	×	○	×	○	×	×
		7E	1	00	XG SYSTEM ON	00=XG system ON	–	○	×	×	×	○	×	○	×	○
		7F	1	00	ALL PARAMETER RESET	00=ON	–	○	×	×	×	○	×	○	×	×

TOTAL SIZE 07

MIDI Parameter Change table (SYSTEM INFORMATION)

Address (H)			Size (H)	Data (H)	Parameter	Description	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
							Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
01	00	00 ... 0D	E	20-7F ... 20-7F	Model Name 1 ... Model Name 14	32...127(ASCII CHARACTER) ... 32...127(ASCII CHARACTER)	–	–	–	×	×	○	×	×	×
		0E	1		NOT USED										
		0F	1		NOT USED										

TOTAL SIZE 10

Transmitted in response to Dump Request. Not received.

MIDI Parameter Change table (EFFECT1)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	00	2	00-7F 00-7F	REVERB TYPE MSB REVERB TYPE LSB	Refer to Effect Parameter List "	01(=HALL1) 00	○			○(Voice Setting)	○	×	○	○	○
		02	1	00-7F	REVERB PARAMETER 1	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		03	1	00-7F	REVERB PARAMETER 2	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		04	1	00-7F	REVERB PARAMETER 3	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		05	1	00-7F	REVERB PARAMETER 4	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		06	1	00-7F	REVERB PARAMETER 5	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		07	1	00-7F	REVERB PARAMETER 6	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		08	1	00-7F	REVERB PARAMETER 7	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		09	1	00-7F	REVERB PARAMETER 8	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		0A	1	00-7F	REVERB PARAMETER 9	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		0B	1	00-7F	REVERB PARAMETER 10	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		0C	1	00-7F	REVERB RETURN	-∞dB...0dB...+6dB(0...96...127)	40	○			×	○	×	○	○	×
		0D	1	01-7F	REVERB PAN	L63...C...R63	40	○			×	○	×	○	○	×

TOTAL SIZE 0E

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception: Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	10	1	00-7F	REVERB PARAMETER 11	Refer to Effect Parameter List	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		11	1	00-7F	REVERB PARAMETER 12	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		12	1	00-7F	REVERB PARAMETER 13	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		13	1	00-7F	REVERB PARAMETER 14	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		14	1	00-7F	REVERB PARAMETER 15	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×
		15	1	00-7F	REVERB PARAMETER 16	"	Depends on Reverb Type	○ (* Depends on Reverb Type)			×	○	×	○	○	×

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	20	2	00-7F 00-7F	CHORUS TYPE MSB CHORUS TYPE LSB	Refer to Effect Parameter List "	41(=CHORUS1) 00	○			○ (Voice Setting)	○	×	○	○	○
		22	1	00-7F	CHORUS PARAMETER 1	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		23	1	00-7F	CHORUS PARAMETER 2	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		24	1	00-7F	CHORUS PARAMETER 3	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		25	1	00-7F	CHORUS PARAMETER 4	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		26	1	00-7F	CHORUS PARAMETER 5	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		27	1	00-7F	CHORUS PARAMETER 6	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		28	1	00-7F	CHORUS PARAMETER 7	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		29	1	00-7F	CHORUS PARAMETER 8	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		2A	1	00-7F	CHORUS PARAMETER 9	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		2B	1	00-7F	CHORUS PARAMETER 10	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		2C	1	00-7F	CHORUS RETURN	-∞dB...0dB...+6dB(0...96...127)	40	○			×	○	×	○	○	×
		2D	1	01-7F	CHORUS PAN	L63...C...R63	40	○			×	○	×	○	○	×
		2E	1	00-7F	SEND CHORUS TO REVERB	-∞dB...0dB...+6dB(0...96...127)	00	○			×	○	×	○	○	×

TOTAL SIZE 0F

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception: Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	30	1	00-7F	CHORUS PARAMETER 11	Refer to Effect Parameter List	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		31	1	00-7F	CHORUS PARAMETER 12	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		32	1	00-7F	CHORUS PARAMETER 13	"	Depends on Chorus Type	○(* Depends on Chorus Type)			×	○	×	○	○	×
		33	1	00-7F	CHORUS PARAMETER 14	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		34	1	00-7F	CHORUS PARAMETER 15	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×
		35	1	00-7F	CHORUS PARAMETER 16	"	Depends on Chorus Type	○ (* Depends on Chorus Type)			×	○	×	○	○	×

TOTAL SIZE 06

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	40	2	00-7F 00-7F	VARIATION TYPE MSB VARIATION TYPE LSB	Refer to Effect Parameter List "	05(=DELAY L,C,R) 00	○			×	○	×	○	○	×
		42	2	00-7F 00-7F	VARIATION PARAMETER 1 MSB VARIATION PARAMETER 1 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		44	2	00-7F 00-7F	VARIATION PARAMETER 2 MSB VARIATION PARAMETER 2 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		46	2	00-7F 00-7F	VARIATION PARAMETER 3 MSB VARIATION PARAMETER 3 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		48	2	00-7F 00-7F	VARIATION PARAMETER 4 MSB VARIATION PARAMETER 4 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		4A	2	00-7F 00-7F	VARIATION PARAMETER 5 MSB VARIATION PARAMETER 5 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		4C	2	00-7F 00-7F	VARIATION PARAMETER 6 MSB VARIATION PARAMETER 6 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		4E	2	00-7F 00-7F	VARIATION PARAMETER 7 MSB VARIATION PARAMETER 7 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		50	2	00-7F 00-7F	VARIATION PARAMETER 8 MSB VARIATION PARAMETER 8 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		52	2	00-7F 00-7F	VARIATION PARAMETER 9 MSB VARIATION PARAMETER 9 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		54	2	00-7F 00-7F	VARIATION PARAMETER 10 MSB VARIATION PARAMETER 10 LSB	" "	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		56	1	00-7F	VARIATION RETURN	-∞dB...0dB...+6dB(0...96...127)	40	○			×	○	×	○	○	×
		57	1	01-7F	VARIATION PAN	L63...C...R63	40	○			×	○	×	○	○	×
		58	1	00-7F	SEND VARIATION TO REVERB	-∞dB...0dB...+6dB(0...96...127)	00	○			×	○	×	○	○	×
		59	1	00-7F	SEND VARIATION TO CHORUS	-∞dB...0dB...+6dB(0...96...127)	00	○			×	○	×	○	○	×
		5A	1	00-01	VARIATION CONNECTION	INSERTION, SYSTEM	00	○			×	○	×	○	○	×
		5B	1	00-7F	VARIATION PART NUMBER	Reception: Part1...16(0...15) Transmission: Part1...16(0...15) AD(64) OFF(127)	7F	○			×	○	×	○	○	×
		5C	1	00-7F	MW VARIATION CONTROL DEPTH	-64...0...+63	40	○			×	○	×	○	○	×
		5D	1	00-7F	BEND VARIATION CONTROL DEPTH	-64...0...+63	40	○			×	○	×	○	○	×
		5E	1	00-7F	CAT VARIATION CONTROL DEPTH	-64...0...+63	40	○			×	○	×	○	○	×
		5F	1	00-7F	AC1 VARIATION CONTROL DEPTH	-64...0...+63	40	○			×	○	×	○	○	×
		60	1	00-7F	AC2 VARIATION CONTROL DEPTH	-64...0...+63	40	○			×	○	×	○	○	×

TOTAL SIZE 21

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
02	01	70	1	00-7F	VARIATION PARAMETER 11	Refer to Effect Parameter List	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		71	1	00-7F	VARIATION PARAMETER 12	"	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		72	1	00-7F	VARIATION PARAMETER 13	"	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		73	1	00-7F	VARIATION PARAMETER 14	"	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		74	1	00-7F	VARIATION PARAMETER 15	"	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×
		75	1	00-7F	VARIATION PARAMETER 16	"	Depends on Variation Type	○ (* Depends on Variation Type)			×	○	×	○	○	×

TOTAL SIZE 06

MIDI Parameter Change table (EFFECT2)

Address (H)			Size (H)	Data (H)	Parameter	Description	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
							Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
03	n	00	2	00-7F	INSERTION EFFECT TYPE MSB	Refer to Effect Parameter List	○			○ (Voice Setting)	○	×	○	○	○
				00-7F	INSERTION EFFECT TYPE LSB	"									
		02	1	00-7F	INSERTION EFFECT PARAMETER 1	"	○ (* Depends on Insertion Type)			○ (Voice Setting)	○	×	○	○	○
		03	1	00-7F	INSERTION EFFECT PARAMETER 2	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		04	1	00-7F	INSERTION EFFECT PARAMETER 3	"	○ (* Depends on Insertion Type)			○ (Voice Setting)	○	×	○	○	○
		05	1	00-7F	INSERTION EFFECT PARAMETER 4	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		06	1	00-7F	INSERTION EFFECT PARAMETER 5	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		07	1	00-7F	INSERTION EFFECT PARAMETER 6	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		08	1	00-7F	INSERTION EFFECT PARAMETER 7	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		09	1	00-7F	INSERTION EFFECT PARAMETER 8	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		0A	1	00-7F	INSERTION EFFECT PARAMETER 9	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		0B	1	00-7F	INSERTION EFFECT PARAMETER 10	"	○ (* Depends on Insertion Type)			○ (Voice Setting)	○	×	○	○	○
		0C	1	00-7F	INSERTION EFFECT PART NUMBER	Reception: Part1...16(0...15) Transmission: Part1...16(0...15) AD(64) OFF(127)	○			○ (Voice)	○	×	○	○	○
		0D	1	00-7F	MW INSERTION CONTROL DEPTH	-64...0...+63	○			×	○	×	○	○	×
		0E	1	00-7F	BEND INSERTION CONTROL DEPTH	-64...0...+63	○			×	○	×	○	○	×
		0F	1	00-7F	CAT INSERTION CONTROL DEPTH	-64...0...+63	○			×	○	×	○	○	×
		10	1	00-7F	AC1 INSERTION CONTROL DEPTH	-64...0...+63	○			×	○	×	○	○	×
		11	1	00-7F	AC2 INSERTION CONTROL DEPTH	-64...0...+63	○			×	○	×	○	○	×
TOTAL SIZE			12												
		20	1	00-7F	INSERTION EFFECT PARAMETER 11	Refer to Effect Parameter List	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		21	1	00-7F	INSERTION EFFECT PARAMETER 12	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		22	1	00-7F	INSERTION EFFECT PARAMETER 13	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		23	1	00-7F	INSERTION EFFECT PARAMETER 14	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		24	1	00-7F	INSERTION EFFECT PARAMETER 15	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
		25	1	00-7F	INSERTION EFFECT PARAMETER 16	"	○ (* Depends on Insertion Type)			○ (Voice Setting)	○	×	○	○	○
TOTAL SIZE			6												
		30	2	00-7F	INSERTION EFFECT PARAMETER 1 MSB	Refer to Effect Parameter List	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 1 LSB	"									
		32	2	00-7F	INSERTION EFFECT PARAMETER 2 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 2 LSB	"									
		34	2	00-7F	INSERTION EFFECT PARAMETER 3 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 3 LSB	"									
		36	2	00-7F	INSERTION EFFECT PARAMETER 4 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 4 LSB	"									
		38	2	00-7F	INSERTION EFFECT PARAMETER 5 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 5 LSB	"									
		3A	2	00-7F	INSERTION EFFECT PARAMETER 6 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 6 LSB	"									
		3C	2	00-7F	INSERTION EFFECT PARAMETER 7 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 7 LSB	"									
		3E	2	00-7F	INSERTION EFFECT PARAMETER 8 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 8 LSB	"									
		40	2	00-7F	INSERTION EFFECT PARAMETER 9 MSB	"	○ (* Depends on Insertion Type)			×	○	×	○	○	×
				00-7F	INSERTION EFFECT PARAMETER 9 LSB	"									
		42	2	00-7F	INSERTION EFFECT PARAMETER 10 MSB	"	○(* Depends on Insertion Type)			○(Voice Setting)	○	×	○	○	○
				00-7F	INSERTION EFFECT PARAMETER 10 LSB	"									
TOTAL SIZE			14												

The EFFECT2 Parameter cannot be reset to its factory setting with XG SYSTEM ON.

The second byte of the address is considered as an Insertion effect number.
n : insertion effect number

For effect types that do not require MSB, the Parameters for Address 02-0B will be received and the Parameters for Address 30-42 will not be received.
For effect types that require MSB, the Parameters for Address 30-42 will be received and the Parameters for Address 02-0B will not be received.
When Bulk Dumps that include Effect Type data are transmitted, the Parameters for Address 02-0B will always be transmitted. But, effects that require MSB, when the bulk dump is received the Parameters for Address 02-0B will not be received.

MIDI Parameter Change table (MULTI PART)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
08	nn	00	1	00-20	NOT USED			×	×	×	×	×	×	×	×	×
		01	1	00-7F	BANK SELECT MSB	0...127	part10=7F, other parts=00	○	○	×	×	○	×	○	○	×
		02	1	00-7F	BANK SELECT LSB	0...127	00	○	○	×	×	○	×	○	○	×
		03	1	00-7F	PROGRAM NUMBER	1...128	00	○	○	×	×	○	×	○	○	×
		04	1	00-0F,7F	Rcv CHANNEL	1...16,OFF	Part No.	○	×	×	×	○	×	○	×	×
		05	1	00-01	MONO/POLY MODE	MONO, POLY	01	○	×	×	×	○	×	○	×	×
		06	1	00-02	SAME NOTE NUMBER KEY ON ASSIGN	SINGLE, MULTI, INST(for Drum)	01	○	×	×	×	○	×	○	×	×
		07	1	00-03	PART MODE	NORMAL, DRUM, DRUMS1...2	part10=02, other parts=00	○	×	×	○ (Drum Voice)	○	×	○	×	○
		08	1	28-58	NOTE SHIFT	-24...0...+24 [semitones]	40	○	○	×	×	○	×	○	○	×
		09 0A	2	00-0F 00-0F	DETUNE	-12.8...0...+12.7 [Hz] 1st bit3-0 → bit7-4 2nd bit3-0 → bit3-0	08 00	○	○	×	×	○	×	○	×	×
		0B	1	00-7F	VOLUME	0...127	64	○	○	×	×	○	×	○	○	×
		0C	1	00-7F	VELOCITY SENSE DEPTH	0...127	40	○	○	×	○(Voice Setting)	○	×	○	○	○
		0D	1	00-7F	VELOCITY SENSE OFFSET	0...127	40	○	○	×	○(Voice Setting)	○	×	○	○	○
		0E	1	00-7F	PAN	RND,L63...C...R63	40	○	○	×	×	○	×	○	○	×
		0F	1	00-7F	NOTE LIMIT LOW	C-2...G8	00	○	○	×	×	○	×	○	×	×
		10	1	00-7F	NOTE LIMIT HIGH	C-2...G8	7F	○	○	×	×	○	×	○	×	×
		11	1	00-7F	DRY LEVEL	0...127	7F	○	○	×	×	○	×	○	○	×
		12	1	00-7F	CHORUS SEND	0...127	00	○	○	×	×	○	×	○	○	×
		13	1	00-7F	REVERB SEND	0...127	28	○	○	×	×	○	×	○	○	×
		14	1	00-7F	VARIATION SEND	0...127	00	○	○	×	×	○	×	○	○	×
		15	1	00-7F	VIBRATO RATE	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		16	1	00-7F	VIBRATO DEPTH	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		17	1	00-7F	VIBRATO DELAY	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		18	1	00-7F	FILTER CUTOFF FREQUENCY	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		19	1	00-7F	FILTER RESONANCE	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		1A	1	00-7F	EG ATTACK TIME	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		1B	1	00-7F	EG DECAY TIME	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		1C	1	00-7F	EG RELEASE TIME	-64...0...+63	40	○	○	×	×	○	×	○	○	×
		1D	1	28-58	MW PITCH CONTROL	-24...0...+24 [semitones]	40	○	○	×	×	○	×	○	×	×
		1E	1	00-7F	MW LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	○	×	×	○	×	○	×	×
		1F	1	00-7F	MW AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	○	×	×	○	×	○	×	×
		20	1	00-7F	MW LFO PMOD DEPTH	0...127	0A	○	○	×	×	○	×	○	×	×
		21	1	00-7F	MW LFO FMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		22	1	00-7F	MW LFO AMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		23	1	28-58	BEND PITCH CONTROL	-24...0...+24 [semitones]	42	○	○	×	×	○	×	○	×	×
		24	1	00-7F	BEND LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	○	×	×	○	×	○	×	×
		25	1	00-7F	BEND AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	○	×	×	○	×	○	×	×
		26	1	00-7F	BEND LFO PMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		27	1	00-7F	BEND LFO FMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		28	1	00-7F	BEND LFO AMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×

TOTAL SIZE 29

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
		30	1	00-01	Rcv PITCH BEND	OFF, ON	01	○	×	×	×	○	×	○	×	×
		31	1	00-01	Rcv CH AFTER TOUCH(CAT)	OFF, ON	01	○	×	×	×	○	×	○	×	×
		32	1	00-01	Rcv PROGRAM CHANGE	OFF, ON	01	○	×	×	×	○	×	○	×	×
		33	1	00-01	Rcv CONTROL CHANGE	OFF, ON	01	○	×	×	×	○	×	○	×	×
		34	1	00-01	Rcv POLY AFTER TOUCH(PAT)	OFF, ON	01	○	×	×	×	○	×	○	×	×
		35	1	00-01	Rcv NOTE MESSAGE	OFF, ON	01	○	×	×	×	○	×	○	×	×
		36	1	00-01	Rcv RPN	OFF, ON	01	○	×	×	×	○	×	○	×	×
		37	1	00-01	Rcv NRPN	OFF, ON	XGmode=01, GMmode=00	○	×	×	×	○	×	○	×	×
		38	1	00-01	Rcv MODULATION	OFF, ON	01	○	×	×	×	○	×	○	×	×
		39	1	00-01	Rcv VOLUME	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3A	1	00-01	Rcv PAN	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3B	1	00-01	Rcv EXPRESSION	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3C	1	00-01	Rcv HOLD1	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3D	1	00-01	Rcv PORTAMENTO	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3E	1	00-01	Rcv SOSTENUTO	OFF, ON	01	○	×	×	×	○	×	○	×	×
		3F	1	00-01	Rcv SOFT PEDAL	OFF, ON	01	○	×	×	×	○	×	○	×	×
		40	1	00-01	Rcv BANK SELECT	OFF, ON	01	○	×	×	×	○	×	○	×	×
		41	1	00-7F	SCALE TUNING C	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		42	1	00-7F	SCALE TUNING C#	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		43	1	00-7F	SCALE TUNING D	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		44	1	00-7F	SCALE TUNING D#	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		45	1	00-7F	SCALE TUNING E	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		46	1	00-7F	SCALE TUNING F	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		47	1	00-7F	SCALE TUNING F#	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		48	1	00-7F	SCALE TUNING G	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		49	1	00-7F	SCALE TUNING G#	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		4A	1	00-7F	SCALE TUNING A	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		4B	1	00-7F	SCALE TUNING A#	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		4C	1	00-7F	SCALE TUNING B	-63...0...+63 [cent]	40	○	○	×	○ (Other Setting)	○	×	○	×	○
		4D	1	28-58	CAT PITCH CONTROL	-24...0...+24 [semitones]	40	○	○	×	×	○	×	○	×	×
		4E	1	00-7F	CAT LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	○	×	×	○	×	○	×	×
		4F	1	00-7F	CAT AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	○	×	×	○	×	○	×	×
		50	1	00-7F	CAT LFO PMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		51	1	00-7F	CAT LFO FMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		52	1	00-7F	CAT LFO AMOD DEPTH	0...127	00	○	○	×	×	○	×	○	×	×
		53	1	28-58	PAT PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○	×	○	×	×
		54	1	00-7F	PAT LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○	×	○	×	×

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
						Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
55	1	00-7F	PAT AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○	×	○	×	×
56	1	00-7F	PAT LFO PMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
57	1	00-7F	PAT LFO FMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
58	1	00-7F	PAT LFO AMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
59	1	00-5F	AC1 CONTROLLER NUMBER	0...95	10	○	×	×	×	○	×	○	×	×
5A	1	28-58	AC1 PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○	×	○	×	×
5B	1	00-7F	AC1 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○	×	○	×	×
5C	1	00-7F	AC1 AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○	×	○	×	×
5D	1	00-7F	AC1 LFO PMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
5E	1	00-7F	AC1 LFO FMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
5F	1	00-7F	AC1 LFO AMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
60	1	00-5F	AC2 CONTROLLER NUMBER	0...95	11	○	×	×	×	○	×	○	×	×
61	1	28-58	AC2 PITCH CONTROL	-24...0...+24 [semitones]	40	○	×	×	×	○	×	○	×	×
62	1	00-7F	AC2 LOW PASS FILTER CONTROL	-9600...0...+9450 [cent]	40	○	×	×	×	○	×	○	×	×
63	1	00-7F	AC2 AMPLITUDE CONTROL	-100...0...+100 [%]	40	○	×	×	×	○	×	○	×	×
64	1	00-7F	AC2 LFO PMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
65	1	00-7F	AC2 LFO FMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
66	1	00-7F	AC2 LFO AMOD DEPTH	0...127	00	○	×	×	×	○	×	○	×	×
67	1	00-01	PORTAMENTO SWITCH	OFF, ON	00	○	○	×	×	○	×	○	○	×
68	1	00-7F	PORTAMENTO TIME	0...127	00	○	○	×	×	○	×	○	○	×
69	1	00-7F	PITCH EG INITIAL LEVEL	-64...0...+63	40	○	×	×	×	○	×	○	×	×
6A	1	00-7F	PITCH EG ATTACK TIME	-64...0...+63	40	○	×	×	×	○	×	○	×	×
6B	1	00-7F	PITCH EG RELEASE LEVEL	-64...0...+63	40	○	×	×	×	○	×	○	×	×
6C	1	00-7F	PITCH EG RELEASE TIME	-64...0...+63	40	○	×	×	×	○	×	○	×	×
6D	1	01-7F	VELOCITY LIMIT LOW	1...127	01	○	×	×	×	○	×	○	×	×
6E	1	01-7F	VELOCITY LIMIT HIGH	1...127	7F	○	×	×	×	○	×	○	×	×

TOTAL SIZE 3F

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
70	1		NOT USED		–	–	–	–	–	–	–	–	–	–
71	1		NOT USED		–	–	–	–	–	–	–	–	–	–
72	1	00-7F	EQ BASS GAIN	-12dB...+12dB	40	○	○	×	○ (Voice Setting)	○	×	○	○	○
73	1	00-7F	EQ TREBLE GAIN	-12dB...+12dB	40	○	○	×	○ (Voice Setting)	○	×	○	○	○

TOTAL SIZE 04

Address (H)	Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
74	1		NOT USED		–	–	–	–	–	–	–	–	–	–
75	1		NOT USED		–	–	–	–	–	–	–	–	–	–
76	1	04-28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C	○	○	×	○ (Voice Setting)	○	×	○	○	○
77	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36	○	○	×	○ (Voice Setting)	○	×	○	○	○
78	1		NOT USED		–	–	–	–	–	–	–	–	–	–
79	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7A	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7B	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7C	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7D	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7E	1		NOT USED		–	–	–	–	–	–	–	–	–	–
7F	1		NOT USED		–	–	–	–	–	–	–	–	–	–

TOTAL SIZE 0C

nn = PART NUMBER

If there is a Drum Voice assigned to the part, the following parameters are ineffective.

- BANK SELECT LSB
- MONO/POLY MODE
- SCALE TUNING
- PORTAMENTO
- PITCH EG
- FILTER MODULATION DEPTH (FMOD DEPTH)
- AMPLITUDE MODULATION DEPTH (AMOD DEPTH)

MIDI Parameter Change table (DRUM SETUP)

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	MIDI Reception (effective or not for each part)			MIDI Transmission (generated data)			PLAY		REC
								Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
3n	rr	00	1	00-7F	PITCH COARSE	-64...0...+63	40	○	×	×	×	○	×	○	×	×
		01	1	00-7F	PITCH FINE	-64...0...+63 [cent]	40	○	×	×	×	○	×	○	×	×
		02	1	00-7F	LEVEL	0...127	Depends on the note	○	×	×	×	○	×	○	×	×
		03	1	00-7F	ALTERNATE GROUP	OFF, 1...127	Depends on the note	○	×	×	×	○	×	○	×	×
		04	1	00-7F	PAN	RND, L63...C...R63	Depends on the note	○	×	×	×	○	×	○	×	×
		05	1	00-7F	REVERB SEND	0...127	Depends on the note	○	×	×	×	○	×	○	×	×
		06	1	00-7F	CHORUS SEND	0...127	Depends on the note	○	×	×	×	○	×	○	×	×
		07	1	00-7F	VARIATION SEND	0...127	7F	○	×	×	×	○	×	○	×	×
		08	1	00-01	KEY ASSIGN	SINGLE, MULTI	00	○	×	×	×	○	×	○	×	×
		09	1	00-01	Rcv NOTE OFF	OFF, ON	Depends on the note	○	×	×	×	○	×	○	×	×
		0A	1	00-01	Rcv NOTE ON	OFF, ON	01	○	×	×	×	○	×	○	×	×
		0B	1	00-7F	LOW PASS FILTER CUTOFF FREQUENCY	-64...0...+63	40	○	×	×	×	○	×	○	×	×
		0C	1	00-7F	LOW PASS FILTER RESO-NANCE	-64...0...+63	40	○	×	×	×	○	×	○	×	×
		0D	1	00-7F	EG ATTACK RATE	-64...0...+63	40	○	×	×	×	○	×	○	×	×
		0E	1	00-7F	EG DECAY1 RATE	-64...0...+63	40	○	×	×	×	○	×	○	×	×
		0F	1	00-7F	EG DECAY2 RATE	-64...0...+63	40	○	×	×	×	○	×	○	×	×

TOTAL SIZE 10

Address (H)			Size (H)	Data (H)	Parameter	Description	XG Default (H)	Song	Main Layer Left Left-Layer	Keyboard	Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
		20	1	00-7F	EQ BASS GAIN	-12...+12 [dB]	40	○	×	×	×	○	×	○	×	×
		21	1	00-7F	EQ TREBLE GAIN	-12...+12 [dB]	40	○	×	×	×	○	×	○	×	×
		22	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		23	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		24	1	04-28	EQ BASS FREQUENCY	32...2.0k [Hz]	0C	○	×	×	×	○	×	○	×	×
		25	1	1C-3A	EQ TREBLE FREQUENCY	500...16.0k [Hz]	36	○	×	×	×	○	×	○	×	×
		26	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		27	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		28	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		29	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2A	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2B	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2C	1		NOT USED		–	–	–	–	–	–	–	–	–	–
		2D	1		NOT USED		–	–	–	–	–	–	–	–	–	–

TOTAL SIZE 0E

n: Drum Setup Number (0-1)
rr: note number (0D-5B)
In the following cases, the Clavinova will initialize all Drum Setups.
XG SYSTEM ON received
GM SYSTEM ON received
DRUM SETUP RESET received (only when in XG mode)

- When a part to which a Drum Setup is assigned receives a program change, the assigned Drum Setup will be initialized.
  If the same Drum Setup is assigned to two or more parts, changes in Drum Setup parameters (including program changes) will apply to all parts to which it is assigned.

System Exclusive Messages (1)

* Not Received when Receive Parameter SysEx is set to off.
* Not transmitted when Transmit Parameter SysEx is set to on.

System Exclusive Messages (Universal Realtime messages)

○: available

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)			PLAY		REC
		Song	Main Layer Left Left-Layer	Keyboard		Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
Master Volume	F0 7F XN 04 01 SS TT F7 11110000 F0 = Exclusive status 01111111 7F = Universal Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00000100 04 = Sub-ID #1=Device Control Message 00000001 01 = Sub-ID #2=Master Volume 0sssssss SS = Volume LSB 0ttttttt TT = Volume MSB 11110111 F7 = End of Exclusive	○	×	×	×	×	× (Output as XG Master Volume)	×	○	○	×

System Exclusive Messages (Universal Non Realtime messages)

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)			PLAY		REC
		Song	Main Layer Left Left-Layer	Keyboard		Panel (main generation method)	Song	Midi	PLAY	REW	Recorded from panel
GM1 System On	F0 7E XN 09 01 F7 11110000 F0 = Exclusive status 01111110 7E = Universal Non-Real Time 0xxxnnnn XN = When N is received N=0-F,whichever is received. X=ignored 00001001 09 = Sub-ID #1=General MIDI Message 00000001 01 = Sub-ID #2=General MIDI On 11110111 F7 = End of Exclusive	○	×	×	○ (Voice Setting Reverb Type Chorus Type)	×	○	×	○	×	○

System Exclusive Messages (2)

* Not received when the Receive Parameter SysEx is set to off.
* Not transmitted when the Transmit Parameter SysEx is set to on.

System Exclusive Messages (Preset voice)

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)		
		Song	Main Layer Left Left-Layer	Keyboard		Panel (main generation method)	Song	Midi
String Resonance Depth	F0 43 73 01 50 11 0n 02 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00–0F) 00000010 02 = SubID(String Resonance Depth) 0ddddddd dd = Depth(00–48) 11110111 F7 = End of Exclusive	○	○	×	○ (Other Setting)	○ (Other Setting)	○	×
Sustain Sample Depth	F0 43 73 01 50 11 0n 03 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00–0F) 00000011 03 = SubID(Sustain Sample Depth) 0ddddddd dd = Depth(00–48) 11110111 F7 = End of Exclusive	○	○	×	○ (Other Setting)	○ (Other Setting)	○	×
Key Off Sampling Depth	F0 43 73 01 50 11 0n 04 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00–0F) 00000100 04 = SubID(Key Off Sampling Depth) 0ddddddd dd = Depth(00–50) 11110111 F7 = End of Exclusive	○	○	×	○ (Other Setting)	○ (Other Setting)	○	×
Soft Pedal Depth	F0 43 73 01 50 11 0n 05 dd F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 01110011 73 = Clavinova ID 00000001 01 = Model ID (Clavinova common ID) 01010000 50 = SubID 00010001 11 = SubID 0000nnnn 0n = Channel (00–0F) 00000101 05 = SubID(Soft Pedal Depth) 0ddddddd dd = Depth(00–7F) 11110111 F7 = End of Exclusive	○	○	×	○ (Other Setting)	○ (Other Setting)	○	×

* For each Depth value, the reset value is 40H = voice parameter.

System Exclusive Messages (Others)

MIDI Event	Data Format	MIDI Reception (effective or not for each part)			MIDI Reception (affecting the panel)	MIDI Transmission (generated data)		
		Song	Main Layer Left Left-Layer	Keyboard		Panel (main generation method)	Song	Midi
MIDI Master Tuning	F0 43 1n 27 30 00 00 mm ll cc F7 11110000 F0 = Exclusive status 01000011 43 = YAMAHA ID 0001nnnn 1n n= always 0(when transmit), n=0-F(when receive) 00100111 27 = Model ID of TG100 00110000 30 = Address High 00000000 00 = Address Mid 00000000 00 = Address Low 0000mmmm 0m = Master Tune MSB 0000llll 0l = Master Tune LSB 0ccccccc cc = don't care 11110111 F7 = End of Exclusive		○		○ (Other Setting)	×	○	×

Function		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1–16 1–16	1–16 1–16	
Mode	Default Messages Altered	3 x ************	3 x x	
Note Number:	True voice	0–127 ************	0–127 0–127	
Velocity	Note ON Note OFF	o 9nH , v = 1–127 x 9nH , v = 0	o 9nH , v = 1–127 x	
After Touch	Key's Ch's	x x	x o	
Pitch Bend		o	o 0–24 semi	
Control Change	0, 32 1 5 7, 10, 11 6, 38 64, 66, 67 65 71 , 74 72 , 73 84 91, 93 94 96–97 98–99 100–101 120	o x x o o o x o x x o x x x o x	o o o o o o o o o o o o o o o o	Bank Select Modulation Portament Time Data Entry Portament Sound Controller Sound Controller Portament Control Effect Depth Effect Depth RPN Inc,Dec NRPN LSB,MSB RPN LSB,MSB All Sound Off
Prog Change:	True #	o 0–127 ************	o 0–127	
System Exclusive		o	o	
Common	: Song Pos. : Song Sel. : Tune	x x x	x x x	
System Real Time	: Clock : Commands	o o	x o	
Aux Messages	: All Sound Off : Reset All Cntrls : Local ON/OF : All Notes OFF : Active Sense : Reset	x x x x o x	o (120, 126–127) o (121) x o o x	
Notes:				

Mode 1 : OMNI ON , POLY Mode 2 : OMNI ON ,MONO o : Yes
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF,MONO x : No

Specifications / Technische Daten / Spécifications / Especificaciones

Item	CLP-175	CLP-170	CLP-150
Keyboard	88 keys (A-1–C7)		
Sound Source	AWM Dynamic Stereo Sampling		
Polyphony	max. 128 voices		
Voice Selection	Panel preset for manual performance: 38 voices, XG voices: 480 voices + 12 drum kits		
Effect	Reverb, Chorus, Brilliance, Variation effect, Insertion effect × 3, iAFC		Reverb, Chorus, Brilliance, Variation effect, Insertion effect × 3
Controls	Dual, Split		
Display	LCD		
Recording/Playback	16-track recording/playback, tempo adjustment		
Disk Drive	3.5-inch floppy diskdrive (2DD and 2HD compatible)		–
Pedal	Damper, Sostenuto, Soft		
Demo Songs	16 voice demo songs, 50 preset songs		
Jacks/Connectors	MIDI (IN/OUT/THRU), PHONES X2, AUX IN(L/L+R,R), AUX OUT(L/L+R,R), AUX OUT (LEVEL FIXED)(L,R), TO HOST, USB, AUX PEDAL		
Main Amplifiers	60W × 2 + 20W × 2		60W × 2
Speakers	16cm × 2, 10cm × 2, 3cm (DOME) × 2, 5cm × 2	16cm × 2, 10cm × 2, 3cm (DOME) × 2	16cm × 2, 5cm × 2
Dimensions (W × D × H) (CLP-175: Lid up, CLP170/150: with music rest)	1435mm × 1147mm × 933mm [56-1/2" × 45-1/8" × 36-3/4"] (1435mm × 1147mm × 1390mm [56-1/2" × 45-1/8" × 54-7/16"])	1381mm × 513mm × 857mm [54-3/8" × 20-3/16" × 33-3/4"] (1381mm × 513mm × 1026mm [54-3/8" × 20-3/16" × 40-3/8"])	1381mm × 513mm × 853mm [54-3/8" × 20-3/16" × 33-9/16"] (1381mm × 513mm × 1022mm [54-3/8" × 20-3/16" × 40-1/4"])
Weight	118kg, 260lbs., 2oz	84kg, 185lbs., 3oz	61.5kg, 135lbs., 9oz
Accessories	Owner's Manual, Reference Booklet, "50 Greats for the Piano" Score Collection, Recording Disk		Owner's Manual, Reference Booklet, "50 Greats for the Piano" Score Collection

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